



1937.

**REPORT on the HEALTH
and SANITARY CONDITION
of the
BOROUGH of SCUNTHORPE.**

Medical Officer of Health :
W. HARTSTON, M.D., B.S., M.R.C.P., D.P.H.

Chief Sanitary Inspector
and Director of Public Cleansing :
J. GALLAGHER, M.S.I.A., M.Inst.P.C.

Borough of



Scunthorpe.

Annual Report

ON THE

HEALTH and SANITARY

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1937.

BOROUGH OF SCUNTHORPE.

(Mayor : ALDERMAN B. HOLLAND.)

Public Health Committee

Chairman: Alderman A. E. DOWSE.

Alderman J. A. JACKSON.

Councillor W. H. PULLING.

Councillor Mrs. A. EYRE.

Councillor E. PITTHOOD.

Councillor H. C. COMAN.

Councillor H. SPENCER.

Councillor F. H. B. GOUGH.

Councillor D. J. K. QUIBELL, M.P.

Councillor J. P. MARSHALL.

Councillor J. HUTCHINSON.

(from Nov., 1937).

Ex-Officio Members of Committee:

Alderman B. HOLLAND, Mayor (to November, 1937).

Alderman E. KENNEDY, Mayor (from November, 1937).

Public Health Department.

Medical Officer of Health—

W. HARTSTON, M.D., B.S., M.R.C.P. (Lond.), D.P.H.

Chief Sanitary Inspector and Director of Public Cleansing—

JOSEPH GALLAGHER, M.S.I.A., M.Inst.P.C., Cert.
Meat.Insp.

Sanitary Inspectors—

DAVID P. NASH, C.R.S.I., Cert.Meat.Insp.

W. RODGERS, S.I.J.B.

Pupil Sanitary Inspector—

REGINALD G. PASSEY.

Infectious Diseases Nurse—

Miss E. JONES, S.R.N., & R.F.N. (Cert. Midwife).

Clerks—

Miss M. F. PLUMTREE.

Miss M. POWER.

Public Health Department,
2, Chapel Street,
Scunthorpe.
July, 1938.

TO ALDERMAN A. E. DOWSE, Chairman, and to the
MEMBERS OF THE HEALTH COMMITTEE, Borough
of Scunthorpe.

Introduction to the Annual Report for 1937.

The late appearance of this report is as regrettable as it is unavoidable. In accordance with the injunction of the Ministry of Health, all Tables and Rates are based on the Mid Year estimate of Population supplied by the Registrar General at the end of May. Further, since my time is already very fully occupied with routine clinical and administrative duties, the preparation of this Report can only be pursued in the late evening and at week-ends. The task of compiling the report is by no means a light one, but the value of a permanent series of annual records of the achievements and needs of the Town's Health Services, together with the inferences to be drawn from a study of detailed statistical records, cannot be exaggerated. In places, the Report may appear to express a personal and critical opinion on conditions or practices, or the lack of provision for various Public Health facilities, but I deem it the duty of a Medical Officer to call attention to things which he considers are not satisfactory, and to this end, free comment in the Annual Report is essential. It must be read in the spirit in which it is written, namely as an attempt to point the way to improvement.

The year under review has been an exceptionally busy one for the Health Department. Much has been achieved and preparations have been made for further attacks on conditions which militate against the health and comfort of residents in the Town.

The Birth Rate for Scunthorpe continues to be satisfactory; it is greater than last year and much greater than the average for similar towns or the country as a whole. Frodingham Ward with 146 births provided the highest contribution, beating Ashby by one birth. Frodingham also had the highest birth rate per 1,000 inhabitants. Crosby Ward had the lowest birth rate. The births of males exceeded those of girls by 58. July was the most prolific month for newborn arrivals.

The Death Rate continued to be steady and much lower than the average figure for towns of the size of Scunthorpe and considerably lower than the Death Rate for the whole country. Male deaths exceeded the deaths of females by 36. Ashby Ward had

the highest number of deaths during the year, and February was the month in which most deaths occurred. 40% of all the deaths in the town during the year occurred in persons over 65 years of age, and 9% in infants under 1 year old.

East Ward had the highest mortality rate with 14.2 deaths per 1,000 inhabitants, while Park Ward had the lowest death rate with 5.5 per 1,000.

The Infantile Mortality Rate was the lowest recorded for 9 years.

There was a very considerable reduction in the incidence of infectious disease in 1937 below that of the previous year. The figure of all known cases was less than half that for 1936. The reduction was mainly attributable to fewer Measles, German Measles and Mumps.

There was no noteworthy outbreak of disease during the year, but the incidence of notifiable Pneumonia was nearly double that of 1936. During the Winter there were 5 cases of Paratyphoid. There was an increase in the prevalence of Diphtheria throughout the year, and a noteworthy advance in dealing with this disease was made by the adoption in June of a scheme for the free Immunisation of children against Diphtheria.

The milk supply of the town leaves much to be desired. Bacteriological tests of the purity of samples taken during the year were unsatisfactory in more than half the total number examined. The primitive nature of most of the local dairies and of the methods employed in them for handling milk provides a ready explanation.

The Water supply requires constant vigilance. It is derived from a number of sources, some provided with chemical treatment, some not so endowed for purification. The different areas of supply in the town derive their drinking water from a variable mixture of supplies, so that were a sample taken from a domestic tap, found upon analysis to be unsatisfactory, considerable delay and difficulty would be experienced in isolating the primary source of the water in question. Until the last week of the year, the town's water was found to be bacteriologically pure though chemically hard. In the last week, an adverse bacteriological report led to an investigation resulting in a tightening up of the sanitary supervision of the water supply.

Impending legislation on Factory Inspection and Food and Drugs control will provide a greater measure of active participation by the Public Health Department in these aspects of industrial and individual hygiene.

The Public Health Act, 1936, which became operative at the end of the year contains powers which will enable the Corporation to deal effectively with the menace of caravan encampments and moveable dwellings which have for long been a reproach and a weak point in the sanitary defences of the town.

Plans went forward during the year for an adequate modern Municipal Abattoir and Meat Store to replace the existing unsatisfactory slaughterhouses.

Arrangements have been completed for an investigation into the problem of Atmospheric Pollution in the town and the Health Department of the Corporation will co-operate with the Department of Scientific and Industrial Research of the Home Office in recording measurements of the gaseous and particulate impurities in the air of the district.

There still remain health problems to be dealt with in order to increase comfort and diminish the risk of ill-health. The abolition of cesspools in the town will necessitate a widening of the network of public sewers. Satisfactory accommodation has yet to be provided for the families found to be overcrowded more than a year ago. We must envisage arrangements for the chemical treatment of the water supplies to ensure purity and softness.

The provision of special schools for Mentally retarded and for delicate children in the town and of additional Fever Hospital accommodation must be regarded as urgently needful.

I would plead also for closer co-ordination of private and public medical services. It is a sad reflection on the outlook and public interest of those responsible for the organisation of the local voluntary Hospital that the private Doctors of the Borough and the Public Health Department are excluded from active participation in the management of the Hospital, so depriving the townspeople of the benefit they could derive from the services of those best qualified to know and measure the needs of the sick people of Scunthorpe.

To sum up, I would say that the Health and Sanitary Conditions of the Town are better than they were, there is room for further improvement and the outlook is satisfactory.

I am indebted to many, especially to Mr. Joseph Gallagher, Chief Sanitary Inspector, and to Mr. Walter Farrar, Borough Engineer and Surveyor, for their valuable contributions to this Report.

W. HARTSTON,

Medical Officer of Health.

STATISTICS BRIEFLY SUMMARISED FOR 1937.

Area of the Borough	7,895 acres
Population—(Census 1931)	33,761
(Mid-Year 1937 estimate)	40,270
Number of Inhabited Houses (December 1937 Rate books)	10,143
Density of Population per acre	5
Rateable Value (March 31st, 1937)	£219,539
Penny Rate represents	£843

The 1937 estimate of population given above is supplied by the Registrar General and has been used as the basis of all calculations in this report.

Fertility Rate (Legitimate births per 1,000 Married females under 45 years)	131
Birth Rate (per 1,000 total population)	20.2
("Legitimate" Births— 771 (M. 414 F. 357)	
("Illegitimate" ,, — 41 (M. 21 F. 20)	
Death Rate (per 1,000 total population)	9.8
Stillbirth Rate (per 1,000 total births)	43.1
(Total No.—35 (M. 26 F. 9)	
Infantile Death Rate (per 1,000 live births)	46.8
"Legitimate" Infant Death Rate (per 1,000 "Legitimate" live births)	49.3
"Illegitimate" Infant Death Rate (per 1,000 "Illegitimate" live births)	0
Puerperal Deaths	2
(Puerperal Sepsis 0, Other puerperal causes 2)	
Puerperal Death Rate (per 1,000 total births)	2.35
Deaths, all causes (M. 215 F. 179)	394
Deaths from Cancer (all ages)	47
Deaths from Measles (all ages)	0
Deaths from Whooping Cough (all ages)	0
Deaths from Diarrhoea (under 2 years of age)	1
Zymotic Death Rate	0.07
Tuberculosis Death Rate (all forms)	0.79

SOCIAL CONDITIONS.

Scunthorpe is a compact industrial town of very rapid growth and one of Great Britain's most important iron and steel centres. It is situated between the River Trent (West) and its tributary Bottesford Beck (Eastern boundary), varying in height from 58 to 168 feet above Ordnance Datum. The area of the Borough is 7,895 acres and it measures 4 miles from North to South and $3\frac{1}{2}$ miles from East to West. The geological formation from west to east shows Basement Beds (Gryphoetic), Frodingham Ironstone, Lias Clay, Pecten Bed and Lias Clay. The general contour of the District slopes gently from West to East. Ironstone mining; the smelting, rolling and manufacture of iron and steel; casting of iron, steel and brass; the preparation of road making and building materials; the making-up of blast furnace slag; tar distillation; and the preparation of basic slag fertilizers continued to form the chief industries of the town. "Shift work" in periods of eight hours throughout the day and night complicated the domestic and social life of the majority of the working people of the town.

The local steel industry enjoyed a year of intense activity and prosperity. An increased demand for workers resulted in the immigration of new families, increasing the total and the school population and creating an acute shortage of houses. The sudden influx of several hundred labourers engaged on prolonged building operations at one of the steelworks brought the problem of their accommodation. Most of them were housed in an encampment composed of large wooden huts near the site of their work. Others found lodgings in various private houses in the town and in the only (men's) common lodging house. This resulted in additional work for the Health Department in maintaining vigilant inspection of the hygienic conditions of the encampment and lodgings.

Juvenile delinquency diminished slightly; 118 cases appeared at the Juvenile Courts (130 in 1936) during the year. Of these, 11 were dismissed; 9 were dismissed under the Probation of Offenders Act; 28 were "bound over" under the supervision of the Probation Officers; 23 were "bound over" without supervision; 44 were fined, and 3 offenders were committed to Approved Schools. The offences comprised Larceny, Housebreaking, Wilful damage to property, and various offences against the Road Traffic Act and Regulations.

The number of proved charges of drunkenness among Scunthorpe residents was 140, an increase over the figures for recent years, but explained by the Police Superintendent in the following statement:—"The considerable influx of casual labour into the district during the past 12 months has very materially contributed to the great increase in drunkenness."

The number of fatal motor accidents in the Borough during 1937 was 7 (in 1936 it was 4, 1935—4, 1934—5).

Mr. A. J. Harvey, Manager of the Scunthorpe Labour Exchange, gives the following information on unemployment among Scunthorpe residents during 1937.

List of Unemployed in Scunthorpe.

	Men	Boys	Women	Girls	Total
January	449	52	119	84	704
February	472	31	152	58	713
March	505	34	109	42	690
April	381	65	151	60	657
May	359	37	58	38	492
June	292	25	54	65	436
July	260	51	44	54	409
August	257	26	36	39	358
September	285	16	50	19	370
October	288	39	99	74	500
November	371	26	70	40	507
December	480	31	62	59	632

"The increase in unemployment amongst men during the winter season is due chiefly to the effect of weather conditions on the building trades.

"The increased number of women registered as unemployed in the first four months of the year is due mainly to the absence of work on the land, and, to some extent, the off-season so far as Seaside Hotels and Boarding Houses are concerned.

"Most of the unemployed men on the Scunthorpe Register to-day are of the unskilled type. We are able to place skilled workmen with little difficulty in most cases."

The Total Unemployed in January 1936 was 1,115, and in December 1936 was 637.

Number of persons resident in the Borough who were in receipt of Poor Law relief in 1937:—

DOMICILIARY:

Men	161
Women	221
Children	248
<hr/>	
Total	630
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INSTITUTIONAL:

Total	93
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During the year, plans were formulated for the establishment of a new Youth Centre in the town, to provide suitable recreation and a properly managed meeting place where young persons of both sexes may be enabled to spend their leisure hours in wholesome company under good guidance and to useful purpose. There are already active clubs catering more particularly for boys in Ashby and Crosby as well as the Y.M.C.A. and the "Keenites" clubs in Scunthorpe. The membership of these amounts to less than 700 in all. The new Centre is planned to work on a very much larger basis. So long as the needs and wishes of the youth of Scunthorpe are borne in mind in planning and running this proposed Centre, its success is assured and it may well be regarded as an asset to the mental and physical health of the Town.

BIRTHS.

The total number of live births registered during 1937 was 812 compared with 712 in 1936. For the four quarters of the year in sequence the numbers of births were 187, 191, 220, 214.

41 illegitimate births were registered in 1937 (36 in 1936). This is a high proportion of the total births and has figured so in this district for many years, so that by now there must be a fairly large number of citizens born in Scunthorpe who are tormented by the primitive and senseless stigma of having been born "out of wedlock."

The crude birth rate for 1937 (i.e. births per 1,000 inhabitants) was 20.2 compared with 18.3 in 1936 and 18.1 in 1931. The corresponding birth rate for England and Wales in 1937 was 14.9.

The Fertility Rate, that is the birth rate per 1,000. fertile married women (under 45 years of age) was 131 during the year, as compared with 121 in 1931, the year of the last Census. This is a more reliable index than the crude birth rate per 1,000 total population and the increase shown this year is a manifestation of improved economic and general health conditions in the town.

35 Stillbirths were registered during the year compared with 28 in 1936. The number of stillbirths per 1,000 population was 0.86 compared with a rate of 0.60 for the whole country. This means that for every 23 children delivered alive in Scunthorpe, one is born dead; a high mortality which suggests that greater skill in the obstetric practices of the district should result in a conservation of infant lives, at present a loss to the population. Table 1 gives the Ward distribution of births.

DEATHS.

394 deaths were registered during 1937 compared with 360 in 1936. The crude death rate was 9.8 (9.2 in 1936) and compared favourably with a rate of 12.4 for England and Wales. 160 of the total number of deaths occurred in persons over 65 years of age and 38 in infants of under 1 year.

Tables 2, 3 and 4 give details of the Causes, Age and Sex Groups and Ward Distribution of deaths. The diseases chiefly responsible for death after the first year of life were, in order of incidence, Diseases of Heart and Circulation, Lung Diseases, Cancer, Tuberculosis.

34.7% of the total number of deaths occurred in Public Institutions. The Zymotic Death Rate — that is deaths from Smallpox (0), Measles (0), Scarlet Fever (0), Whooping Cough (0), Diphtheria (2), Diarrhoea (1) and Enteric Fever (0) — a total of 3, was 0.07 per 1,000 population; (0.18 in 1936, 0.13 in 1935).

The Pulmonary Tuberculosis Death Rate was 0.72 (0.38 in 1936), and the Non-Pulmonary Tuberculosis Death Rate was 0.07 (0.2 in 1935) per 1,000 population.

INFANTILE MORTALITY.

A total of 38 infants under 1 year of age died during 1937 compared with 40 in 1936. The Infant Mortality Rate (i.e. deaths of infants under 1 year per 1,000 live births) was 46.8 compared with 56.1 in 1936 and 50.6 in 1935. The Rate for England and Wales in 1937 was 58.

MATERNAL MORTALITY.

Two deaths associated with childbirth occurred during the year. Puerperal sepsis caused no fatalities.

MEDICAL SERVICES IN THE AREA.

INSTITUTIONS.

Brumby Isolation Hospital. (Lindsey County Council).

Situated in East Common Lane, admits cases of infectious disease and Tuberculosis from the Borough and surrounding district. 30 beds are available for infectious disease and 14 for cases of tuberculosis. This number is inadequate for the area served and cases of infectious disease arising in the Borough have to be removed to institutions at Grimsby and Doncaster for isolation and treatment.

During 1937 there were admitted to Brumby Isolation Hospital:—

Scarlet Fever	63 cases
Diphtheria	50 „
Paratyphoid Fever	5 „
Tuberculosis (2 Non-pulmonary)	40 „
Measles	3 „
Measles with Pneumonia	1 case
Measles with Burns	1 „
Measles with Appendicitis	1 „
Mumps and Appendicitis	2 cases
Scarlatina with Pink Disease	1 case
Erysipelas	3 cases
Whooping Cough with Pneumonia	1 case
Anterior Poliomyelitis	1 „
Diphtheria with Measles	1 „
Leukaemia	1 „

Died during the year:—

Tuberculosis	15 cases
Diphtheria	3 „
Scarlatina with Pink Disease	1 case
Erysipelas	1 „
Leukaemia	1 „

Operations performed during the year:—

One mastoidectomy, 3 appendicectomy.

Sickness among Staff:—

4 cases of Diphtheria, 2 cases of Scarlet Fever, 3 cases of Influenza, 2 cases of Tonsillitis, 3 infected fingers, 4 other conditions.

Tuberculosis Ward.

5 patients were treated with tuberculin.

20 patients were treated with Sanocrysin.

5 patients were treated by Artificial Pneumothorax.

59 refills being given.

2 cases were treated by thoracoplasty.

The majority of the cases of Tuberculosis were admitted in an advanced state of disease which accounts for the high mortality.

Scunthorpe Maternity Home. (Lindsey County Council).

This institution is situated in Brumby Wood Lane, provides 21 beds (including 4 private rooms) and 6 isolation beds, the latter were not fully used owing to restrictions laid down by the Ministry of Health due to the lack of accommodation for a separate nursing staff for these beds. Plans have been approved to provide increased accommodation for patients at the Home.

Any woman living in the County area may be delivered in the Home by her Private Medical Practitioner or by the Maternity Staff of the Home (Matron, 6 qualified midwives and 10 nurses). In the latter case, Ante-natal supervision is also provided throughout pregnancy.

During 1937 there were 390 normal confinements conducted in the Home and 68 abnormal cases of which 26 were emergencies. The number of cases admitted for ante-natal supervision was 52 and for post-natal care 18, making a total number of cases admitted during the year 528.

Lindsey and Lincoln Joint Smallpox Hospital.

This institution at Osgodby has 32 beds available for cases of Smallpox. It is administered by a Joint Board. No cases were admitted from Scunthorpe during 1937.

Scunthorpe and District War Memorial Hospital. Cliff Gardens.

This is a general voluntary hospital of 150 beds (of which 9 are for Private patients) dealing chiefly with surgical cases and with accidents and catering for the Borough and surrounding country for a radius of approximately 10 miles.

Further extensions are planned to provide additional private beds; a larger Out-Patient Department; and improved X-Ray Department and a Laundry.

A special Fracture Clinic established during the year is now a practical unit of the Hospital's Out-Patient Department. It is proposed to provide a County Radium Centre for the treatment of Cancer at this Hospital.

Brigg Institution.

This hospital, situated six miles from Scunthorpe and maintained and administered by the Public Assistance Committee of the Lindsey County Council, provides accommodation (87 beds) for the sick poor of the district. 93 persons from Scunthorpe were admitted to Brigg Institution during 1937. Admission to a "Poor Law Institution" still carries with it some stigma in the minds of the Public and of Doctors and it is hoped that appropriation of this Institution by the County Public Health Committee next year will result in greater use and increased popularity of the Brigg Infirmary.

Bracebridge Heath Mental Hospital. Lincoln. (Lindsey County Council).

1,200 beds are available here for the treatment of mental disorder arising in persons resident in the area. 11 persons (6 male, 5 female) from Scunthorpe were admitted to Bracebridge during 1937.

Harmston Hall Colony (Lincs. Joint Board) **and Caistor Institution for Mental Defectives.** (Lindsey County Council).

Provide accommodation for certified mental defectives.

Branston Hall, Lincoln. (Lindsey County Council).

Is a sanatorium admitting cases of early tuberculosis occurring in Female adults and in children from this area.

OTHER MEDICAL SERVICES.

Blood Transfusion Service.

This consists of 50 volunteer Donors of both sexes, organised during the year by the Scunthorpe Division of the British Medical Association. The Donors have been tested and grouped and they are available for transfusion purposes to any Medical Practitioner working in the Borough.

Private Medical Practitioners.

There are 17 Doctors living in the Borough engaged in Private practice—an increase of 2 over 1936. In addition, 4 Doctors living just outside the Borough also treat residents within the Town boundary.

Midwives.

The total number of practising Midwives in the District is 25, of whom 11 are attached to the Nursing Associations, and 7 to the Maternity Home. The remaining 7 are in private practice. All hold the certificate of the Central Midwives Board. No alteration in this service is proposed by the County Council in connection with the Midwives Act, 1936.

Ambulance Facilities.

(a) **FOR INFECTIOUS CASES.** Removal is carried out by the Brumby Isolation Hospital Ambulance (Lindsey C.C.) or by the Authorities of the Hospital to which the patients are sent.

(b) **FOR NON-INFECTIOUS AND ACCIDENT CASES.** Three of the large Steel Works have private ambulances for the use of their employees. The St. John Ambulance Brigade and the British Red Cross Society each maintains an ambulance for general use in the district. At present this provision is adequate.

Scunthorpe Borough Nursing Association was formed during the year by the amalgamation of the 3 previously existing nursing associations in the area.

The Association now comprises 10 nurses and a Superintendent. All forms of domiciliary maternity and general nursing are carried out. During 1937, 748 new general cases were attended involving 23,538 visits. 334 maternity cases necessitating 7,540 visits were also attended.

Public Assistance Domiciliary Medical Relief.

Sick persons in receipt of Poor Law Relief are given the choice of Medical Attendant from a small panel of 5 Scunthorpe Doctors who have agreed to give service under the County Council's Scheme.

Vaccination against Smallpox.

Free vaccination is provided:—

1. In the case of every child resident in the district on the request of the parent or other person in charge of the child.
2. In the case of every child resident in the district aged 4 months or more and as to whom the Public Vaccinator has received the requisite notice from the Vaccination Officer.
3. In the case of any person other than a child who applies to the Public Vaccinator for primary vaccination or for re-vaccination.

Public Vaccinators:—

Dr. J. H. Bellamy, Sandfield, Ashby.

Dr. T. Cullen, 76, Oswald Road, Scunthorpe.

OTHER AGENCIES.

National Society for the Prevention of Cruelty to Children.

This Society continued to co-operate fully and readily with the Public Health Department in matters affecting the health concerns of children, in finding suitable institutional accommodation and in bringing to the notice of the department certain cases in which action could be taken to prevent ill-health or to remedy existing defects.

During the year 66 cases involving the welfare of 183 children were investigated by Mr. F. W. Jones, the Scunthorpe and North Lindsey Branch Inspector, who found most cases to be neglectful failure to provide adequate food, clothing or medical treatment.

Occupation Centre for Mental Defectives.

This is held at the Y.M.C.A., High Street, Scunthorpe. The accommodation is insufficient and unsatisfactory. A separate building situated in quiet surroundings with a large garden in which the children can work and play is greatly to be desired.

14 children were on the register at the end of 1936 increasing to 17 at the end of 1937. Only 3 children were able to read and write. 4,664 attendances were recorded out of a possible 5,606.

The types of mental defect are mostly imbecility, feeble-mindedness and mongolism.

Rugmaking, knitting, sewing, simple domestic work, personal hygiene and some physical training are the chief occupations provided.

The value of the Occupation Centre in schooling these difficult children and in providing hours of peace and freedom for their parents is too high to be assessed in words or figures and is deserving of greater recognition and encouragement.

Laboratory Services.

A considerable amount of bacteriological work is done by the Medical Officer of Health in the Laboratory of the Borough Public Health Department, for Medical Practitioners and Clinics in the area.

725 specimens were examined during the year (333 in 1936). Private Doctors in the town can obtain a report on the bacteriological examination of a swab for Diphtheria within 24 hours on any day of the week. There is no laboratory in the country which can provide a better service than this.

The services of other laboratories in Lincoln, Grimsby, Sheffield and London are employed for carrying out tests for which our own laboratory is not equipped.

PUBLIC BATHS.

The following attendances were recorded during 1937:—

Swimming Baths—Ordinary	56,099
Schools	13,015
Slipper Baths	9,770
Foam Baths	227
	<hr/>
	79,117

During the year 3 clubs enjoyed regular exclusive sessions for swimming and polo.

The swimming baths were inspected by the Medical Officer of Health and Chief Sanitary Inspector on several occasions during the year. The analyses of samples of swimming bath water taken during 1937 are given below.

Sample from Public Swimming Baths.	Juvenile Pool.	Large Pool.
Taken on	22.5.37.	22.5.37.
Temperature on arrival	16°C.	16°C.
Number of colonies per ml. developing on Agar in:—		
3 days at 20°C.	900	120
48 hours at 37°C.	900	26

B. Coli Test.

Probable number of bacteria of the Coli Aerogenes Group present in 100 mls. of the water	none	none
Clostridium Welchii with 100 mls. ...	absent	absent
Free Chlorine	none	none
Suspended Matter	none	none
Appearance	clear ; colourless	clear ; colourless
Remarks of Analyst	" High bacterial count probably due to post-chlorination growth."	Satisfactory

Public Mortuaries.

The Scunthorpe War Memorial Hospital for an annual fee provides the use of the Hospital Mortuary to the Borough Council, for the reception of bodies found dead. This mortuary was used by Police for this purpose 38 times during the year.

The Borough Council also provides and maintains a small Public Mortuary in Rowland Road for the reception of special cases such as bodies brought into the town dead of infectious disease. This mortuary was not used during 1937.

Abortions.

No provision exists in Scunthorpe for the Institutional accommodation of straightforward or of infected abortions. The War Memorial General Hospital refuses to admit these cases on the ground that they come within the purview of the County Council Maternity Scheme and the County Council takes steps to recover the cost of treatment of such conditions from the patient or her responsible relatives and this gives rise to difficulties between the Hospital and the members of its Contributory Scheme.

The result has been that cases are sent for treatment to an Institution (Edenfields Nursing Home) at Doncaster. Local Medical Practitioners feeling that such a journey must involve considerable risk to cases of abortion, petitioned the County Council in October through the Scunthorpe Division of the British Medical Association to make suitable arrangements for the treatment within the Borough of all forms of abortion.

At the end of the year, such a service had not yet been provided.

Co-ordination of Medical Services.

The Medical Officer of Health for the Borough is also Assistant Medical Officer to the County Council. In the latter appointment he is Tuberculosis Officer; Venereal Diseases Medical Officer; Medical Superintendent of the County Isolation Hospital; School Medical Inspector and Anaesthetist to the School Dental Clinic. He also conducts the Diphtheria Immunisation Clinic.

These multifarious duties keep him in touch with all aspects of the Health of the townspeople. The holding of the Ante-natal and the Child Welfare Clinics in the same premises as those in which your Medical Officer of Health works, provides for frequent exchange of opinion and mutual assistance with the County Maternity and Child Welfare Medical Officer.

Your Medical Officer of Health holds office in the Local Division of the British Medical Association. This ensures active contact, cordial relations and close co-operation with the local

private medical Practitioners and is of immense value to the Public Health Department and therefore to the town and its inhabitants.

The Infectious Diseases Nurse who treats cases of Ophthalmia Neonatorum in their homes under the supervision of Private Medical Practitioners, is also the nurse in the Female Venereal Diseases Treatment Centre. She is thus enabled to persuade the mothers of all known cases of Ophthalmia to come to the centre for investigation and treatment.

Consultation and Treatment Clinics. (Lindsey County Council).
1937.

Antenatal —County Clinic, Parkinson Avenue	Thursdays, 9 a.m.—12 noon.
Maternity Home	Tuesdays, 11 a.m.—12 noon.
Child Welfare —County Clinic	Mondays and Thursdays, 2—4 p.m.
Ashby, Wesleyan Hall	Tuesdays, 2—4 p.m.
Mothercraft —County Clinic	Wednesdays, 3 p.m.
Minor Ailments in School Children	
County Clinic	Daily 9 a.m.—12 noon.
Ophthalmic do.	Thursdays, 10 a.m.
Tuberculosis do.	Mondays, 2—4 p.m. (Women and Children)
	Fridays, 2—4 p.m. (Men).
Artificial Pneumothorax Treatment do.	Thursdays 2 p.m.
Ultra Violet Ray do.	Mondays and Thursdays, 10 a.m.—12 noon.
Venereal Troubles do.	Male: Mornings 9-30 a.m.—12 noon Evenings 5-30—7-30 p.m. daily Monday—Saturday (except Monday morning)
	Female: Mondays 10 a.m.—12 noon Wednesdays 2—4 p.m. Intermediate treatment by appointment.
Orthopaedic do.	1st and 3rd Tuesday in each month 2—4 p.m.
Massage do.	1st and 3rd Tuesday in each month 2—4 p.m.
Dental do.	By appointment. Dentist attends daily.
Heart Diseases do.	By arrangement. Specialist attends once every 2 months.
Diphtheria Immunisation do.	Thursdays 2-30 p.m.

The Parkinson Avenue (County) Clinic premises comprise, under one roof, a group of well-built and well-situated clinics abundantly used and appreciated by the local residents. Accommodation for all necessary services is somewhat cramped and plans have been approved for extension of the existing building.

CANCER.

47 deaths were registered as due to Cancer. The following Table shows the certified incidence of fatalities from this disease during the past decade. The figures must, of course, be viewed in the light of a steadily increasing population. The figure for deaths from Cancer may be taken to represent one third of the cases alive during that year.

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Cancer ...	24	29	33	34	36	36	38	34	37	47
All causes	238	350	327	349	325	359	320	340	360	394

The County Council still have under consideration a scheme for improving the facilities for treatment by Radium and X-rays.

The following Table gives a summary of the Death Certificates issued during 1937 relating to fatal Cancer cases.

		Cause of Death and		Occupation.	
Sex	Age	Site of Cancer			
M	78	Pharynx		Paper Maker	
M	76	Prostate		Boiler Maker (Retired)	
M	76	Liver		Ironstone Quarry Labourer (Retired).	
M	76	Stomach		Elementary Schoolmaster (Retired).	
M	76	Stomach		Steelworks Loco Driver (Retired)	
M	74	Liver		Ironworks Blast Furnace Keeper (Retired).	
M	71	Colon		District Council Labourer	
M	69	Stomach		Hotel Omnibus Driver	
M	67	Neck		Footman Gentlemen's Service (Retired)	
M	65	Prostate		Agricultural Labourer	
M	65	Oesophagus		Fish Dealer	
M	63	Rectum		Steel Works Labourer	
M	61	Colon		Steel Works Foreman Rigger	
M	60	Rectum		Insurance Agent	
M	59	Colon		Grocer and General Shopkeeper	
M	58	Stomach		Beer Brewery Stock Keeper	
M	54	Liver		Cement Works Labourer	
M	50	Stomach		Slag Works Labourer	
M	32	Lungs		Blast Furnace Man	
F	86	Stomach		Housewife	
F	79	Liver		Housewife	
F	74	Stomach		Housewife	
F	73	Breast		Housewife	
F	72	Stomach		Housewife	
F	70	Liver		Housewife	
F	68	Uterus		Housewife	
F	67	Breast		Housewife	
F	60	Pylorus		Housewife	
F	59	Uterus		Housewife	
F	59	Inguinal Glands		Housewife	
F	58	Uterus		Housewife	
F	58	Cæcum		Housewife	
F	56	Breast		Housewife	
F	56	Breast		Housewife	
F	55	Colon		Housewife	
F	54	Cæcum		Housewife	
F	54	Uterus		Housewife	
F	53	Larynx		Housewife	
F	52	Breast		Housewife	
F	52	Stomach		Housewife	
F	52	Stomach		Housewife	
F	52	Uterus		Housewife	
F	49	Cæcum		Housewife	
F	47	Larynx		Housewife	
F	40	Breast		Housewife	
F	38	Uterus		Housewife	
F	37	Lungs		Housewife	
			Alimentary Canal	Generative Organs	Liver
Males	.....	19	12	2	3
Females	.....	28	10	12	2
		—	—	—	—
		47	22	14	5
					6
					Other Sites

MENTAL DEFICIENCY, 1937.

Borough cases dealt with during the year :—

	Males.	Females.	Total.
In Institutions for the Mental Defective			
Under Order	3	5	8
Under Guardianship	1	1	2
Under Statutory Supervision	16	19	35
In P.A. or other institutions not under			
Order	1	1	2
Reported to the Local Authority (Lindsey C.C.) but no action taken. (Cases not subject to be dealt with under the M.D. Acts)...	13	14	27
Under Voluntary Supervision	3	2	5
	—	—	—
	37	42	79
	—	—	—

BLIND.

Number of Scunthorpe Blind Adults registered with the Lindsey
County Council during 1937 2

Number of Scunthorpe Blind Children registered with the
Lindsey County Council during 1937 1

DEAF.

Number of deaf persons known to the Lindsey County Council
during 1937 :—

(a) Adults 19

(b) Children (including 2 at Santon) 4

VENÉREAL DISEASES.

During 1937 a total of 202 new cases (114 males) attended the Lindsey County Council Clinic. This is an increase of 75 (56 of who were males) over the figure for 1936; which is probably due in large measure to the improved facilities for treatment for men engaged in shift work made available during the year by the provision of an evening clinic and to the special advertisement of treatment facilities arranged during the year by the exhibition of notices in all Public Conveniences.

Of the 202 new cases 19 were cases of Syphilis (15 males), 83 Gonorrhoea (67 males) and 100 "non-venereal" genital disorders (70 females). 3 new cases of inherited Syphilis attended the clinic during the year. The total number of consultations with the clinic medical officers was 2,021 and the number of attendances for "intermediate" treatment by the nurse or orderly was 2,507. Both figures are higher than those for 1936.

Exactly half the total number of new male patients with definite venereal diseases were married.

All new male cases were asked to state the town in which they had acquired their infection and in a large majority of cases this had taken place outside Scunthorpe. The incidence of Venereal Diseases in Scunthorpe is comparatively low.

2 cases of Syphilis, 60 Gonorrhoea and 100 of conditions other than venereal, were discharged cured during the year.

The adoption of recently discovered improved remedies for Gonorrhoea resulted in more rapid cure with considerable shortening of the period of infectivity more especially in males. 23 patients with frank venereal disease failed to attend the clinic to complete the treatment they needed to effect a cure. They will suffer later for this default.

There remained under treatment at the end of 1937, 26 cases of Syphilis, 24 of Gonorrhoea, and 12 non-venereal cases.

All the figures quoted above include a small number of cases living outside the Borough but attending the Scunthorpe Clinic which also serves the neighbouring districts.

489 Pathological tests were carried out during the year on patients attending the Venereal Clinic.

The large number of "non-venereal" cases treated at the clinic (and most of them rapidly cured) is a feature common to all such clinics and is due to the fact that a variety of genital

disorders similar in symptomatology to the venereal diseases attend the clinic for diagnostic tests and remain for treatment because this is the only place in the town which provides for the special treatment of these maladies.

Towards the end of the year a special propaganda public lecture and film exhibition on the subject of Venereal Disease dangers was provided in the town by the British Social Hygiene Council at the request of the Lindsey County Council.

There can be no exact measure of the results of such propaganda, but the attendance of the public and their interest in the subject of venereal disease presented in this way, is a token of the value of such dissemination of knowledge, which must surely have a beneficent influence towards a diminution of the incidence and spread of these disorders and of the misery they entail.

PREVALENCE AND CONTROL OF INFECTIOUS DISEASES.

Accurate figures are known for the incidence of those infectious diseases which are statutorily notifiable by Medical Practitioners. For those non-notifiable diseases such as Measles, Chicken-Pox, Mumps, Infective Conjunctivitis, Whooping Cough, Influenza and the Common Cold; though sometimes serious and disabling; accurate figures for incidence are not available. An approximate estimate of the incidence of some of these conditions is obtained from Head Teachers' returns of school absenteeism.

No serious epidemic of infectious disease occurred during the year.

The severe measles epidemic in the late months of 1936 continued to the middle of February, 1937. A sharp outbreak of chicken-pox was observed between May and July and Scunthorpe shared with the rest of the country, an increased incidence of fairly mild Influenza in the early months of the year. Diphtheria was unusually prevalent throughout the year.

The total number of notifiable infectious disease cases during the year was 400 compared with 377 for 1936. In addition a further 470 cases were brought to the notice of the Health Department by parents and others, bringing the total of all forms of infectious disease to 870 compared with 1,760 in 1936. This reduction derives mainly from fewer Measles, German Measles and Mumps.

The incidence of notifiable Pneumonia was nearly twice that for 1936 and had its peak in January.

Statistics relating to various aspects of the incidence of infectious disease in the Borough are given in Tables 10, 11, 12 and 15. January with 202 cases was the month bearing the heaviest prevalence of infection, while September with 18 was the quietest month. Deaths during the year from infectious disease numbered 3 (Diphtheria 2, Diarrhoea 1) giving a Zymotic Death Rate of 0.07 per 1,000 population which is a very low figure.

As a measure of economy and because the existing arrangements for the supervision of Measles were considered satisfactory, the Corporation sought the abandonment of the compulsory notification of Measles and German Measles and this became effective in June, 1937, by the Scunthorpe (Measles and German Measles Regulations) Rescission Order, 1937, dated June 25th, 1937, made by the Minister of Health.

The County and Borough Councils share the cost of providing an infectious diseases Nurse who visits all known cases at their homes to supervise isolation, to advise parents and when necessary to assist in treatment (See Table 13).

Chicken-Pox.

The prevalence of this disease increased in 1937 as compared with the previous year. 286 cases came to the notice of the Public Health Department. Most of the cases of which the Department becomes aware are school children, as the disease is only made compulsorily notifiable during outbreaks of Smallpox. June and July bore the heaviest incidence.

Cerebro Spinal Meningitis.

One case was notified in 1937 and this ended fatally.

Diphtheria.

65 cases of Diphtheria occurred during 1937 compared with 21 in 1936. 53 cases were in children under 15 years of age and 12 in persons between 15 and 65 years.

60 cases were removed to Hospital, the remainder being treated at their homes. There were 2 deaths.

488 Swabs (213 in 1936) were examined in the Health Department during the year by culture and microscopy for the presence of Diphtheria bacilli. I have observed that the more throats and noses are submitted for examination for the presence of Diphtheria bacilli the greater will be the proportion of positive findings and the higher will be the recorded incidence of Diphtheria. This probably accounts to some extent for the increased number of notifications of this disease during 1937. Many of the positive swabs relate to "Carriers" of the Diphtheria bacillus, not all of them dangerous. The greater the number of contacts swabbed and examined, the greater is the number of apparent Carriers discovered. In Scunthorpe where Diphtheria is endemic, a proportion of the school population harbour in the nasopharynx an organism culturally identical with the Diphtheria bacillus. These are our "Carriers" and they may be in this state for intermittent periods. Further, the virulence of these Carriers is variable. A Carrier whose throat cultures prove avirulent at one time, not infrequently provides virulent cultures at a later date. This increased incidence of carriers and their unexpected assumption of virulence is particularly noticeable during epidemics of Diphtheria and this complicates the control of outbreaks making it necessary to isolate comparatively large numbers of immune bacteria bearing contacts sometimes for long periods. It would be risky to do otherwise.

The larger the number of children immunised against Diphtheria the greater will be the number of immune carriers in the child population and while these may be an advantage to other immunised persons in maintaining high the level of their immunity by repeated sub-infection—a "salting" of the community—they are a possible menace to non-immune susceptibles, who happen to migrate into the population in which these carriers exist.

All this leads us to the conclusion that safety can only be obtained by widespread immunisation.

When all children have been successfully immunised the number of carriers will not matter at all. Diphtheria will have been stamped out and be a disease of historic interest only. But this state of affairs is less than unlikely. Unfortunately the desire of parents for active immunisation against Diphtheria, even during outbreaks of the disease is by no means widely manifest. Suspicion, ignorance and apathy are responsible for the lack of zeal on the part of most parents offered free protection for their children. A misguided if generous desire of certain parents to save their children "pain," is probably also in large measure responsible for the low figure of those with acquired active artificial immunity to the disease.

Diphtheria is preventable and should be prevented, but the large number of parents who turn a deaf ear to such exhortations is a sorry reflection on their intelligence and foresight. The scheme for free immunisation of school children and children under school age in Scunthorpe became operative in June, 1937. Between that date and the end of December 728 children were immunised by subcutaneous injection of Diphtheria toxoid (Alum precipitated), the County Council bearing the cost of toxoid.

17 phials of toxoid were supplied to Private Medical Practitioners for the immunisation of that number of children. The remainder of those immunised under the scheme were done by the Medical Officer of Health.

61 phials of Diphtheria Antitoxin provided by the Borough Council were issued free to Private Doctors for the early treatment of cases of Diphtheria awaiting removal to hospital.

Enteric Fever.

5 cases of Para-typhoid B were notified during the year. One of these cases occurred in a woman living outside Scunthorpe who was admitted to the local general hospital for investigation. This case and two others occurred in September. Another case cropped up in November and the remaining one at the end of December. No aetiological factor common to all these cases was discovered.

Encephalitis Lethargica.

No cases were notified during 1937 though 2 deaths were certified to this cause.

Erysipelas.

13 cases were notified compared with 18 in 1936 and 26 in 1935. In 11 cases the face was involved. There was 1 death.

Measles and German Measles.

225 cases of Measles and 1 of German Measles were notified during 1937. This is a much lower incidence than for 1936 (328 Measles, 671 German Measles). There were no deaths from these diseases.

Malaria.

No case was notified.

Mumps.

78 cases were reported compared with 298 in 1936.

Ophthalmia Neonatorum.

6 cases were notified. All were visited and treated by the Infectious Diseases Nurse.

<u>Case.</u>	<u>Treated at</u>	<u>Effect on Vision.</u>
No. 1.	Home.	Unimpaired.
No. 2.	Home.	Died after leaving district.
No. 3.	Home.	Unimpaired.
No. 4.	Home.	Unimpaired.
No. 5.	Home.	Unimpaired.
No. 6.	Home.	Still under treatment December, 1937.

Pneumonia ("Acute Primary" and "Influenzal").

56 cases were notified during the year compared with 31 in the preceding year. A high incidence of Primary and of Influenzal Pneumonia (secondary or Broncho Pneumonia is not notifiable, and Pneumonia deaths refer to all forms of the disease) is seen to occur in those years in which there has been a large number of deaths attributed to Influenza. The following chart makes this clear.

Year.	Notifications of Pneumonia Primary and Influenzal.			Deaths from Influenza.
1928	18			6
1929	69			44
1930	69			10
1931	76			26
1932	63			15
1933	66			20
1934	30			3
1935	31			5
1936	31			10
1937	56			19

Puerperal Fever and Pyrexia.

3 Notifications of Puerperal Fever and 19 of Puerperal Pyrexia were received in 1937.

Puerperal Fever ceased to be a notifiable disease at the beginning of the 4th quarter of the year, thereafter all cases of febrile puerperium became notifiable as "Puerperal Pyrexia."

Details of the cases are given in a separate Table at the end of this report.

Acute Anterior Poliomyelitis.

1 Notification was received during 1937.

Scarlet Fever.

55 Cases were notified during the year, exactly the same number as in 1936. All were mild cases. 44 were removed to Hospital for isolation.

Smallpox.

No cases occurred in the Borough in 1937.

No action was taken under the Public Health (Smallpox Prevention) Regulations, 1917.

Whooping Cough.

6 Cases were notified compared with 106 in the preceding year.

STATUTORY RULES AND ORDERS

1937 No. 599.

PUBLIC HEALTH, ENGLAND.

Notification of Infectious Diseases.

The Scunthorpe (Measles and German Measles Regulations)

Rescission Order 1937 dated June 25 1937 made by the
Minister of Health.

91420

Whereas by the Scunthorpe and Frodingham (Measles and German Measles) Regulations 1923 (a) provision was made for the notification and treatment of cases of measles and german measles occurring in the urban district of Scunthorpe and Frodingham ;

And whereas by Royal Charter dated the 1st day of August 1936 the said urban district was created a borough by the name of the Borough of Scunthorpe ;

And whereas it is expedient that the said regulations should be rescinded :

Now therefore the Minister of Health in pursuance of his powers in that behalf hereby rescinds the said regulations :

Provided that the rescission of the said regulations shall not affect any right or liability acquired or incurred thereunder.

This Order may be cited as the Scunthorpe (Measles and German Measles Regulations) Rescission Order, 1937 and shall come into operation on the date hereof.

Given under the official seal of the Minister of Health this
twenty-fifth day of June nineteen hundred and thirty-seven.

(L.S.

I. F. ARMER,

Assistant Secretary,

Ministry of Health.

Tuberculosis.

Facilities for the diagnosis and supervision of cases of Tuberculosis are provided by the County Council at the Tuberculosis Dispensary in Parkinson Avenue where cases from the Borough and an area of approximately 5 miles round the town are received. Increased use of the Dispensary and of the Tuberculosis Officer was made during 1937. The majority of patients seen, lived in the Borough.

Artificial Pneumothorax treatment was introduced during the year and 11 patients were treated by this method, involving 147 refills. In addition 10 patients received gold treatment.

The Dispensary serves as a "sorting house" to which suspicious cases are sent by Private Doctors for special investigation and where contacts of known cases may be examined and supervised. It also serves as a centre for the treatment by special methods of tuberculous persons who are ambulant. A large number of patients are kept under observation and examined periodically for evidence of infection. X-Ray examinations are arranged and carried out mostly at the War Memorial Hospital. 250 such radiographic examinations were performed during 1937. The number increases every year and the need for an X-Ray unit at the Dispensary has become a matter of urgency. A Carbon arc artificial sunlight apparatus for treating non-pulmonary tuberculosis would also be a beneficent provision. Sanatorium treatment is provided by the County Council at a variety of Institutions.

Considerable difficulty is experienced in persuading some cases of tuberculosis to avail themselves of sanatorium treatment. This may be due to fear, to stupidity, or to the financial problems facing a married insured man whose National Health Insurance benefit—seldom adequate to maintain a house and family—is suddenly halved after 26 weeks illness. A case of fairly severe pulmonary tuberculosis will require a lot more than 26 weeks of absence from work.

211 new cases were examined at the Scunthorpe Dispensary during the year 1937 this is an increase of 80 over the figure for the previous year. In addition 104 contacts of known cases of Tuberculosis were examined and 14 (15%) found to be suffering from the disease. This demonstrates the importance of close supervision and repeated examination of Tuberculosis family contacts, in whom the incidence of infection is very much higher than in the general population. It also shows how important is the necessity for isolating cases of advanced pulmonary tuberculosis to diminish spread of the disease. Children and adolescent contacts are those most susceptible to infection.

At the end of 1937 the Register of Tuberculosis for the Borough showed 179 Pulmonary cases and 69 Non-pulmonary cases. During the year 86 new cases were notified and there were 32 deaths. The age distribution and other details are given in Table 15.

The number of new notified cases per 1,000 population has risen during the past ten years. Most of the new lung cases seen during the year were found at their first examination to show signs of severe involvement though in several of these, symptoms were of recent onset.

83 Cases resident in the Borough received Institutional treatment during 1937 (Pulmonary 72 adults, 4 children; Non-Pulmonary 4 adults, 3 children).

The Secretary of the Tuberculosis Care Committee (Mr. F. Bartle) contributes the following report of the year's work:—"As in previous years the main work has been the provision of extra nourishment in the way of butter, eggs and milk to necessitous patients. During 1937 3,225 pints of milk and 331lbs. of butter have been supplied. When found necessary, patients have been provided with suitable new clothing. On one occasion when the Tuberculosis Officer recommended a holiday for a patient, the committee arranged for and helped to send her to a Convalescent Home and we are pleased to record that the patient greatly improved from the change.

"So that their Christmas would not be fireless, the Committee supplied a bag of coal to each patient receiving benefit.

"Adequate nurture, medical treatment, freedom from worry and the provision of suitable clothing are the cardinal needs of every tuberculous patient. The Care Committee sets itself the task of assisting patients to obtain a sufficiency of food and clothing, and as far as possible relieves their mental anxieties by helping to place patients in employment when they are sufficiently recovered, by providing for the care of children while the parent is in Sanatorium or assisting the household of a patient confined to bed at home by the provision of a "Home Help."

HEALTH CONDITIONS IN CONNECTION WITH LOCAL FACTORIES.

The supervision of sanitary accommodation at factories and workshops in the town is the duty of the Borough Health Department, and the standard found locally reaches the average for this type of industry. 197 inspections were carried out by the Department during the year. Additional washing facilities for workmen were provided at one large steelworks. New canteens were erected at two works. The consumption of milk at Works canteens is a new and pleasing feature fostered by the Milk Marketing Board and has been adopted enthusiastically by the workmen.

The supervision of arrangements for the prevention and treatment of Health Hazards due to industrial processes is directly under control of the Home Office.

H.M. Inspector of Factories reports that there is considerable risk of Carbon Monoxide gasping owing to the large amount of blast furnace and coke-oven gas used in the manufacture of steel. Eight cases of gasping occurred during the year.

There is risk of epitheliomatous (cancerous) ulceration from handling pitch tar, bitumen and mineral oil. One local works in which the tar hazard exists has arranged for a six monthly voluntary medical examination of its employees. This arrangement should go far to abolish the incidence of tar Cancer since the early changes could be recognised and treatment instituted to prevent the onset of malignant deviation.

Handling of refractory material, mainly used in furnace linings may give rise to silicosis (a dangerous lung disease).

One small factory manufacturing lagging compounds bears a risk of asbestosis (lung disease).

During the year I came across several cases of a disabling angiospastic syndrome in the upper limbs of men engaged at local steelworks in steel chipping or rivetting, handling compressed air machines. These men gave a history of numbness and blanching of the fingers with loss of power of the hand. Some also complained of pain and stiffness of the wrist joints. X-Ray examination of the hands of five such cases failed to reveal any bone changes, and the condition is presumed to be an arterial spasm induced by prolonged contact with vibrating pneumatic machinery.

Great care is taken at all large factories in the town to avoid accidents and elaborate and satisfactory arrangements exist in

the four large steelworks for the immediate treatment of injuries arising in the course of employment. A "Safety-first" Committee at each Works maintains suitable organisation to reduce the risk of accidents, and supervises the activities of the First Aid stations established at the Works. Workmen are encouraged to report even the most trivial injury for immediate treatment to avoid any risk of serious sequelae from delay or carelessness.

The table below gives figures for accidents occurring during 1937 at the 4 large steelworks in the town including a Coke-oven building contractor.

Minor Accidents (chiefly skin wounds)	23,683
Major Accidents (involving loss of work for more than three days)	960
Fatal Accidents	3

Of 1,004 "Three day accidents" at all the factories in the town, 960 occurred in Steelworkers. The average stay off work was $2\frac{1}{2}$ weeks. The incidence of these accidents in the Scunthorpe Steelworks was 9.6% compared with an average figure of 11% for the Iron and Steel trade throughout the country.

The number of "3 day accidents" at all steelworks in Scunthorpe per 1,000 hours worked, was lower in 1937 than in 1936 in spite of the extra work done during the year under review. These figures reflect very creditably the activities of the Works Accident Prevention Committees.

MEDICAL INSPECTION OF SCHOOLS.

Each school in the Borough is inspected by the School Medical Officer twice a year. Five groups of children are examined at each inspection:—

1. "Entrants"—i.e. newcomers to the school since the last inspection and under 8 years of age.
2. "Intermediates"—Children between 8 and 9 years of age.
3. "Leavers"—Children over 12 years of age who have not been examined since attaining their twelfth birthday.
4. "Specials"—Cases brought forward for examination at any age at the request of Parent, Teacher, Nurse or child.
5. "Revisions"—Those children who at a previous inspection were found to manifest some defect.

Ophthalmic cases and defects of the Ear, Nose and Throat, Bones and Joints, Teeth and Heart are referred to the County Council's specialists in these subjects. Other cases are referred to Private family Doctors.

During the year a special clinic for the advice and observation of cases of Worms and of Enuresis was started by Dr. Rosie.

A treatment clinic for minor ailments such as discharging ears, impetigo and scabies is open every day.

In addition to the medical examination of scholars, each school is subjected to a hygienic survey and defects reported for attention. Most of the schools in the Borough are very satisfactory in this respect. There are still some schools without hot water for washing and I think it would be advisable to replace the linen roller towels by individual paper towels so as to limit infection and inculcate a sense of personal hygiene.

The structure of part of Ashby Infants and of Santon School is primitive.

The number of elementary and secondary school children examined during the year is shown below. It must be remembered that a small number of pupils at Scunthorpe schools, included in these figures, live outside the Borough.

		Inspected.		Requiring Treatment.	
		Elementary.	Secondary.	Elementary.	Secondary.
"Entrants"	...	539	111	108	9
"Intermediates"	.	604	—	105	—
"Leavers"	... ..	622	38	92	4
"Specials"	... ..	65	2	—	—
"Revisions"	... ..	1539	59	—	—

In the main the health of the school children of Scunthorpe is good; more especially is this true of the secondary school children.

The commonest defects found at medical inspection requiring treatment are Chronic Tonsillitis, Defective Vision and Bad Teeth. Details in Table 16.

I have often noticed that cleaner and better teeth are more numerous in those schools where the Head Teacher takes the

trouble to impress on his pupils in various ways the requirements of dental hygiene. A "shield," cup, or trophy, to be awarded annually to the school with the lowest incidence of dental caries would be a sound health investment.

There is no **nursery school** in the Borough.

There is no "**Open-Air School**" in the Borough. Such a school is very desirable, to accommodate those "delicate" children who apart from a possible need of the physiological stimulus of "open-air" cannot withstand the rough and tumble of their more sturdy school-fellows. They are the children who at playtime in an ordinary school, are seen motionless, pale and frightened at the periphery of the moving throng, afraid to join in the general hubbub. Such children need quieter surroundings and school-fellows and a gentler rate of educational progress.

The employment of school children, usually in delivering newspapers before and after school hours, is an unsatisfactory procedure. I think it is undesirable that school children should be allowed to rush through an early morning breakfast in order to be able to deliver papers at 7-30 a.m. or that they should have to reach home, have tea and get to the paper shop in the half-hour between 4 p.m. and 4-30 p.m. The fault rests on those parents who are prepared to sacrifice a school child's leisure, comfort and self-respect in order to add 3/6 per week to the household income. I am informed that the Education Department have no jurisdiction in regard to the hours of employment of school children outside the school sessions so long as the employment does not interfere with the health of the child. It seems that the School Medical Officer must await the onset of damage to a child's health due to work out of school hours before he can exclude the child from such a hazard.

The following notifications of **infectious disease in school children** were received during 1937 from all sources:—

Diphtheria	46	Scarlet Fever	37
Pulmonary Tuberculosis ...	3	Other Tuberculosis	8
Chickenpox	133	Measles	47
Pneumonia	11	Mumps	41
Whooping Cough	6		

An outbreak occurred in March and April of "Catarrhal Conjunctivitis" (Pink Eye) affecting 50 out of 323 scholars at Gurnell Street School. Spread was limited to the Boys Department by daily attendance of the School Nurse, exclusion of severe cases, the daily prophylactic instillation of eye drops, the suspension of mixed playtime and the abandonment of communal towels with replacement of the latter by individual paper towels.

School Clinic in 1937 was open on 254 sessions, attended by 1,055 children (928 in 1936) who made 10,438 total attendances. Average attendance per session—41.

The commonest conditions appearing for advice or treatment were: Impetigo 396 cases, Miscellaneous 366, Eyes 129, Other skin disease 66, Nose and Throat 86, Discharging Ear 48, Scabies 31, Ringworm body 4, Ringworm scalp 1.

HEALTH EDUCATION.

A determined attempt was made during the year to arouse the attention and interest of school children and the general public in all aspects of health.

To this end the Health Committee agreed to the distribution of a local edition of "Better Health," a monthly journal published by the Central Council for Health Education in which a full page article of topical hygienic interest is contributed by your Medical Officer or some other member of the Health Department.

Wide interest has been shown in the town in this journal which costs the Corporation nothing, the expense of publication being defrayed by advertisement revenue. The Scunthorpe Edition has been in circulation since March.

A large number of posters drawing attention to various health matters were exhibited in all parts of the town throughout the year.

In October, the Health Department entered enthusiastically into the "National Campaign to Encourage the Use of the Health Services" directed by the Ministry of Health who provided posters, folders, leaflets and other publications for display and distribution to bring to the notice of the public the facilities available for promoting health and checking ill-health.

Lectures by the Medical Officer of Health were given to Women's Guilds and gatherings of Senior Scholars.

A supplementary vote of £100 was passed by the Borough Council to be devoted to Health Propaganda from October, 1937, to March, 1938, and though the whole sum was not expended, much was undoubtedly achieved.

A number of very interesting films illustrating aspects of Physiology, Infection, the Care of the Teeth, Vision, Housing and Accident Prevention were hired by the department and exhibited at those schools possessing projection equipment and to the general public at three large local Cinemas. The cordial co-operation of the management of the Jubilee, the Majestic and the Royal Cinemas in this respect is gratefully acknowledged.

A public lecture together with a well-produced film touching on the dangers of Venereal Diseases were provided in the town by the British Social Hygiene Council on behalf of the Lindsey County Council and were well attended.

The Local Press, especially the "Scunthorpe and Frodingham Star," were very helpful throughout the year in publishing articles, "Health Messages" and items of public health interest at the request of this Department.

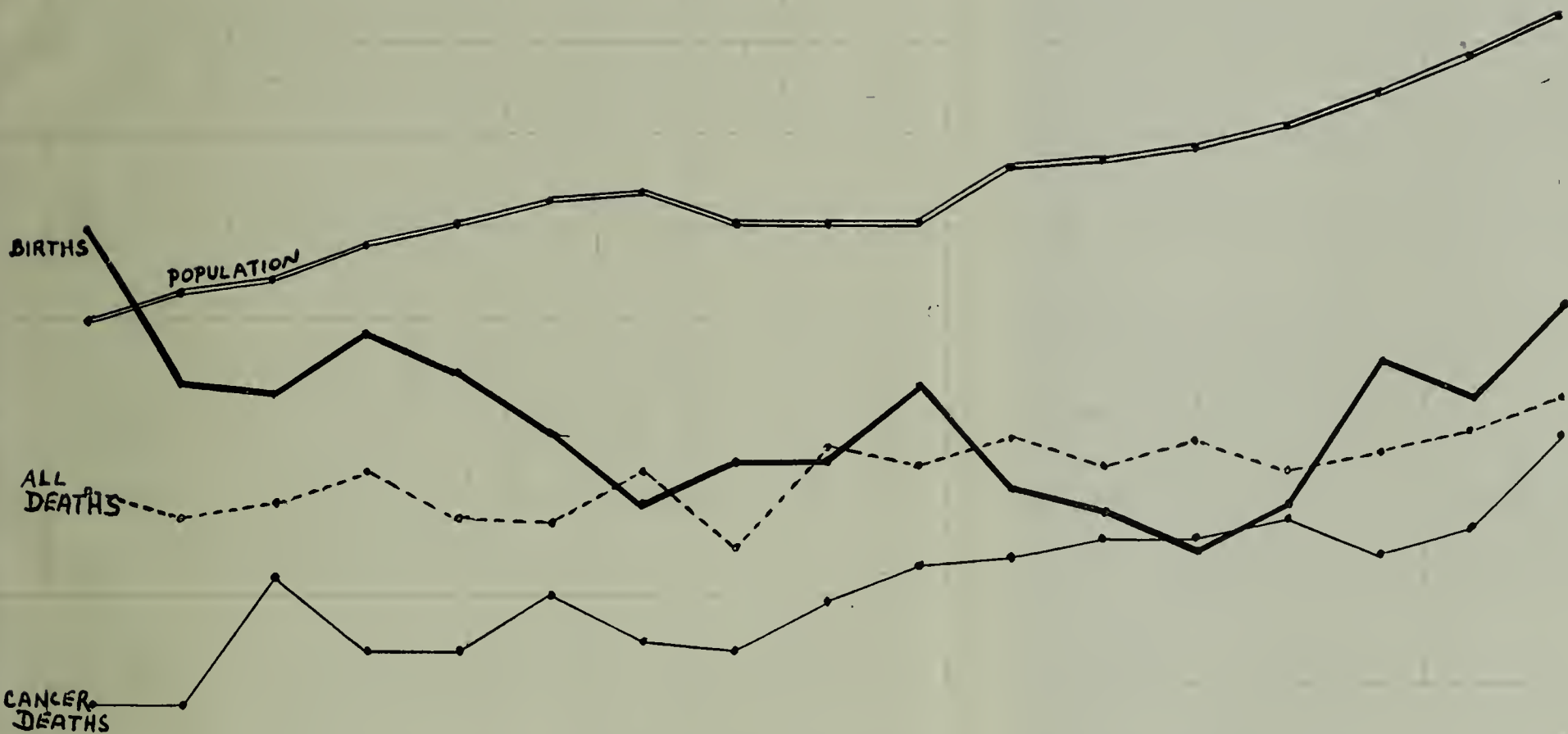
There can be no doubt that the regular visitation by the Sanitary Staff, Nurses and Health Visitors, of food shops, markets, slaughterhouses, offices and private dwellings constitutes Health Education of the most penetrating and valuable kind.

**Estimated Population of 1937 distributed in age groups
in same proportions as 1931 Census.**

Age Group.	Males.	Females.	Persons.
0—5	1829	1797	3626
5—10	2055	2035	4090
10—15	1930	1991	3921
15—20	1836	1771	3607
20—35	5378	5098	10476
35—45	2866	2683	5549
45—65	3836	3481	7317
65+	824	860	1684
Total	20554	19716	40270

METEOROLOGICAL RECORDS 1937.

	Barometer.		Thermometer.		Rainfall inches.
	Maxim.	Min.	Maxim.	Min.	
January	30.35	28.9	46°F	31°F	2.7
February	29.9	28.6	48°F	32°F	1.85
March	29.9	28.7	50°F	32°F	1.63
April	30.3	29.15	68°F	35°F	3.36
May	30.4	29.35	85°F	40°F	2.67
June	30.23	29.8	89°F	44°F	1.52
July	30.15	29.5	85°F	46°F	3.04
August	30.3	29.45	86°F	48°F	0.47
September	30.15	29.05	72°F	42°F	0.84
October	30.5	28.6	66°F	40°F	1.9
November	30.4	29.05	50°F	32°F	1.52
December	30.5	28.75	46°F	30°F	3.0



YEARLY TRENDS

1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937

Table 1.

TOTAL BIRTHS IN BOROUGH OF SCUNTHORPE.

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Total Births	648	651	732	616	591	553	591	750	712	812
Rate per 1,000 of population	20.5	20.4	22.9	18.1	17.3	15.9	16.5	20.1	18.3	20.2
Rate per 1,000 in other towns of population 25,000 to 50,000	16.6	16.0	16.2	15.6	15.4	14.5	15.0	14.8	15.0	15.3
Rate per 1,000 (England and Wales) ...	16.7	16.3	16.3	15.8	15.3	14.4	14.8	14.7	14.8	14.9

1937 BIRTHS—WARD DISTRIBUTION.

	Male.	Female.	Total.	Rate per 1,000
Park	58	60	118	21.1
Crosby	37	34	71	13.8
East	40	30	70	17.1
Town	41	35	76	15.3
West	40	38	78	15.7
Brumby	53	55	108	23.5
Frodingham	81	65	146	27.6
Ashby	85	60	145	25.4
	435	377	812	20.2

1937 ILLEGITIMATE BIRTHS—WARD DISTRIBUTION.

	Male.	Female.	Total.	Rate per 1,000
Park	2	3	5	0.89
Crosby	4	2	6	1.17
East	2	2	4	0.97
Town	2	3	5	1.01
West	2	3	5	1.00
Brumby	3	1	4	0.87
Frodingham	4	3	7	1.32
Ashby	2	3	5	0.87
	21	20	41	0.09

Table 2.

TOTAL DEATHS IN BOROUGH OF SCUNTHORPE.

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Total Deaths	238	350	327	349	325	359	320	340	360	394
Rate per 1,000 of population	7.5	10.9	10.2	10.2	9.5	10.4	8.9	9.1	9.2	9.8
Rate per 1,000 in other towns of population 25,000 to 50,000	10.6	12.3	10.5	11.3	10.8	11.0	11.3	11.2	11.5	11.9
Rate per 1,000 (England and Wales) ...	11.6	13.4	11.4	12.3	12.0	12.3	11.8	11.7	12.1	12.4

1937 DEATHS—WARD DISTRIBUTION.

	Male.	Female.	Total.	Rate per 1,000
Park	14	17	31	5.5
Crosby	22	21	43	8.4
East	40	18	58	14.2
Town	26	29	55	11.1
West	20	23	43	8.6
Brumby	22	18	40	8.7
Frodingham	31	26	57	10.7
Ashby	40	27	67	11.7
	215	179	394	9.8

Deaths of Infants under 1 year:—	M.	F.
Total	23	15
Illegitimate	—	—
Total Births	435	377
Legitimate	414	357
Illegitimate	21	20
Stillbirths:—		
Total	26	9
Legitimate	23	9
Illegitimate	3	—

Table 3.

**REGISTRAR-GENERAL'S FIGURES FOR CAUSES OF DEATH
DURING 1937.**

	Males.	Females.	Total.
Diphtheria	2	—	2
Influenza	9	10	19
Encephalitis Lethargica	—	2	2
Cerebro-spinal Fever	—	1	1
Tuberculosis of Respiratory System ...	13	16	29
Other Tuberculous Diseases	3	—	3
General Paralysis of the Insane	—	1	1
Cancer	19	28	47
Diabetes	1	3	4
Cerebral Haemorrhage, etc.	8	3	11
Heart Disease	51	36	87
Aneurism	2	—	2
Other Circulatory Diseases	9	4	13
Bronchitis	12	8	20
Pneumonia	8	9	17
Other Respiratory Diseases	3	—	3
Peptic Ulcer	3	4	7
Diarrhœa, etc. (under 2 years)	—	1	1
Appendicitis	—	1	1
Cirrhosis of Liver	—	1	1
Other Diseases of Liver	2	—	2
Other Digestive Diseases	4	6	10
Acute and Chronic Nephritis	7	2	9
Puerperal Causes (other than Pyrexia) ...	—	2	2
Congenital Debility and Malformation, Premature Birth	17	8	25
Senility	11	7	18
Suicide	4	2	6
Other Deaths from Violence	13	5	18
Other defined Diseases	14	19	33
	—	—	—
	215	179	394

PERCENTAGE OF TOTAL DEATHS—SCUNTHORPE.

Total Deaths certified by General Practitioners	92.4%
Inquests	4.6%
Coroner's Certification (No Inquest)	2.5%
Uncertified Deaths ... ..	.5%

Table 4.

Causes of Death.		ANALYSIS OF DEATHS ACCORDING TO AGE.																	75 and over	
		All ages.		0-1		1-2		2-5		5-15		15-25		25-45		45-65		65-75		
		M.	F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	
Diphtheria	...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Influenza	...	9	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Encephalitis	...	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cerebro-spinal Fever	...	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Tuberculosis of Respiratory System	...	13	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other Tuberculous Diseases	...	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
General Paralysis of the Insane	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cancer, Malignant Disease	...	19	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Diabetes	...	1	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cerebral Haemorrhage	...	8	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Heart Disease	...	51	36	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Aneurism	...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other Circulatory Diseases	...	9	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Bronchitis	...	12	8	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pneumonia	...	8	9	1	3	1	1	2	—	—	—	—	—	—	—	—	—	—	—	
Other Respiratory Diseases	...	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Peptic Ulcer	...	3	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Diarrhoea (under 2 years)	...	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Appendicitis	...	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cirrhosis of Liver	...	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other Diseases of Liver	...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other Digestive Diseases	...	4	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Acute and Chronic Nephritis	...	7	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other Puerperal Causes	...	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Congenital Debility and Malformation, Premature Birth	...	17	8	17	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Senility	...	11	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Suicide	...	4	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other Deaths from Violence	...	13	5	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other Defined Diseases	...	14	19	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total	...	215	179	23	15	1	4	4	4	2	2	5	12	37	18	52	55	47	30	
		394	38	5	8	4	2	4	17	55	107	77	83							

Table 5.

COMPARATIVE STATISTICS FOR THE YEAR 1937.

(The mortality rates for England and Wales refer to the whole population but for London and the towns to civilians only).

	RATE PER 1,000 POPULATION.		ANNUAL DEATH-RATE PER 1,000 POPULATION							RATE PER 1,000 LIVE BIRTHS			
	Live Births	Still Births	All Causes	Typhoid and Paratyphoid fevers	Small-pox	Measles	Scarlet Fever	Whooping cough	Diphtheria	Influenza	Violence	Diarrhoea and Enteritis (under 2 years)	Total Deaths under 1 year
England and Wales	14.9	0.60	12.4	0.00	—	0.02	0.01	0.04	0.07	0.45	0.54	5.8	58
London	13.3	0.54	12.3	0.00	—	0.01	0.01	0.06	0.05	0.38	0.51	12.0	60
125 County Boroughs and Great Towns, including London.	14.9	0.67	12.5	0.01	—	0.03	0.01	0.04	0.08	0.39	0.45	7.9	62
148 Smaller Towns (Estimated Resident Populations 25,000 to 50,000 at Census 1931).	15.3	0.64	11.9	0.00	—	0.02	0.01	0.03	0.05	0.42	0.42	3.2	55
Scunthorpe	20.2	0.86	9.8	0.00	—	0.00	0.00	0.00	0.04	0.49	0.44	1.2	46.8

The maternal mortality rates for England and Wales are as follows :	Puerperal Sepsis			Total	
	per 1,000 Live Births	per 1,000 Live Births	per 1,000 Live Births	Others	Total
England and Wales	0.97	0.94	0.00	2.26	3.23
London	0.94	0.94	0.00	2.17	3.11
125 County Boroughs and Great Towns, including London.	0.94	0.94	0.00	2.46	3.40
148 Smaller Towns (Estimated Resident Populations 25,000 to 50,000 at Census 1931).	0.94	0.94	0.00	2.35	3.23
Scunthorpe	0.94	0.94	0.00	2.35	3.23

Table 6.

STATISTICS OF WHOLE DISTRICT SINCE 1921 (FIRST YEAR OF COMPLETE RECORDS).

Year.	Population estimated to middle of each year.	Area in Acres.	Density (persons per Acre).	No. of inhabited houses	BIRTHS		DEATHS		At all ages.		Notified Infectious Disease.		Deaths from all Lung Diseases.	Notifications of Tuberculosis.	Deaths from Cancer.
					No.: Rate/ 1,000.	Under 1 year of age. Rate 1,000 Live Births	No.: 1,000	No.: 1,000	Rate/ 1,000	No.: 1,000	No.: 1,000	No.: 1,000			
1921	27,790	7,961	3.49	5,531	906	32.6	77	86.0	308	11.0	391	62	62	79	18
1922	28,530	7,961	3.58	5,989	729	25.5	69	94.6	278	9.7	187	83	83	57	18
1923	29,420	7,961	3.69	6,048	725	24.6	55	75.8	293	9.9	523	89	89	104	32
1924	30,970	7,961	3.89	6,195	786	23.6	62	78.0	324	10.4	837	87	87	91	24
1925	31,430	7,961	3.94	6,287	743	23.6	55	74.0	274	8.7	456	73	73	80	24
1926	32,820	7,961	4.12	6,457	678	20.6	31	45.0	268	8.2	509	56	56	81	30
1927	33,050	7,895	4.18	6,731	606	18.3	47	77.0	321	9.7	797	73	73	83	25
1928	31,660	7,895	4.01	6,866	648	20.5	25	38.0	238	7.5	593	33	33	57	24
1929	31,880	7,895	4.03	7,167	651	20.4	39	60.0	350	10.9	893	73	73	68	29
1930	31,880	7,895	4.03	7,450	732	22.9	44	60.0	327	10.2	853	63	63	68	33
1931	33,990	7,895	4.30	7,548	616	18.1	51	83.0	349	10.2	431	80	80	65	34
1932	34,190	7,895	4.33	7,815	591	17.3	43	73.0	325	9.5	853	40	40	66	36
1933	34,590	7,895	4.38	8,178	553	15.9	33	59.0	359	10.4	261	56	56	60	36
1934	35,710	7,895	4.52	8,568	591	16.5	36	61.0	320	8.9	237	55	55	60	38
1935	37,170	7,895	4.70	9,671	750	20.1	38	51.0	340	9.1	597	54	54	53	34
1936	38,740	7,895	4.90	9,970	712	18.3	40	56.1	360	9.2	377	55	55	83	37
1937	40,270	7,895	5.10	10,143	812	20.2	38	46.8	394	9.8	400	69	69	86	47

(NOTE:—Measles and German Measles were notifiable only during years 1924-1937).

Chickenpox was notifiable on different occasions during prevalence of Smallpox.

Table 7.

VITAL STATISTICS 1937. Ward Distribution.

Wards.	Area in Acres.	Estimated Population (approx.)	No. of inhabited houses. (Electors List).	Density of Population. (Persons per acre).	Birth Rate.	Death Rate.	Infant Death Rate.	Notifications of infectious disease by Doctors.	Notifications of Pneumonia (Primary and Influenzal).	Death Rate from Bronchitis and Pneumonia.	Notifications of Tuberculosis (all forms).	Death Rate from Pulmonary Tuberculosis.	Death Rate from Non-Pulmonary Tuberculosis.
Park	932.5	5591	1571	5.99	21.1	5.5	76	70	5	0.71	13	0.00	0.17
Crosby	1543.4	5114	1116	3.31	13.8	8.4	14	29	1	0.19	9	0.39	0.00
East	503.1	4084	818	8.11	17.1	14.2	57	58	3	2.20	9	0.24	0.00
Town	105.2	4940	1100	46.95	15.3	11.1	13	51	11	1.01	10	1.01	0.00
West	437.7	4959	1400	11.32	15.7	8.6	51	41	3	1.41	9	0.60	0.00
Brumby	1242.4	4593	1368	3.69	23.5	8.7	37	40	9	0.21	11	0.65	0.00
Frodingham	1527.0	5287	1600	3.46	27.6	10.7	47	61	16	0.56	17	1.70	0.18
Ashby	1603.7	5702	1566	3.55	25.4	11.7	55	50	8	1.22	8	1.05	0.17
Total	7895	40270	10539	5.10	20.2	9.8	46.8	400	56	0.91	86	0.72	0.07

Table 8.

DECENIUM OF INFANT MORTALITY—RATE PER 1,000 BIRTHS.

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Scunthorpe ...	38.6	60.0	60.0	83.0	73.0	59.6	60.9	50.6	56.1	46.8
148 smaller towns England and Wales, popula- tion 25,000 to 50,000	60	69	55	62	58	56	53	55	55	55
England & Wales	65	74	60	66	65	64	59	57	59	58

INFANT MORTALITY (WARD DISTRIBUTION) 1937.

Ward.						Males.	Females.		Total.	
Park						4	...	5	...	9
Crosby						—	...	1	...	1
East						4	...	—	...	4
Town						1	...	—	...	1
West						3	...	1	...	4
Brumby						2	...	2	...	4
Frodingham						4	...	3	...	7
Ashby						5	...	3	...	8
						—		—		—
Total Infant Deaths	...	...	...	...	...	23		15		38

Table 9.

ANALYSIS OF CAUSES OF INFANT DEATHS DURING 1937.

Cause of Death	Sex	Under 1 wk.	1-2 wks.	2-3 wks.	3-4 wks.	Total under 4 weeks.	1-3 mths.	3-6 mths.	6-9 mths.	9-12 mths.	Total deaths under 1 yr.
Convulsions	M	1	—	—	—	1	3	—	—	—	4
	F	—	—	—	—	—	—	—	—	—	—
Bronchitis	M	1	—	—	—	1	—	—	1	—	2
	F	—	—	—	—	—	—	1	1	—	2
Pneumonia	M	—	—	—	—	—	—	—	—	1	1
	F	—	—	—	—	—	1	—	2	—	3
Diarrhoea	M	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	1	—	—	—	1
Atelectasis	M	1	—	—	—	1	—	—	—	—	1
	F	2	—	—	—	2	—	—	—	—	2
Congenital Malformations	M	2	—	—	—	2	—	—	—	1	3
	F	—	—	—	1	1	—	—	—	—	1
Premature Birth	M	7	—	—	—	7	—	—	—	—	7
	F	3	—	—	—	3	—	—	—	—	3
Atrophy, Debility and Marasmus	M	1	—	—	—	1	—	1	—	—	2
	F	1	—	—	—	1	1	—	—	—	2
Other Causes	M	2	—	—	—	2	—	—	1	—	3
	F	—	—	—	—	—	—	—	1	—	1
<hr/>											
Males		15	—	—	—	15	3	1	2	2	23
Females		6	—	—	1	7	3	1	4	—	15
<hr/>											
Grand Totals		21	—	—	1	22	6	2	6	2	38

Table 10.

SHOWING THE NUMBERS OF INFECTIOUS DISEASES NOTIFIED
BY MEDICAL PRACTITIONERS FROM 1928 TO 1937.

Disease	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Smallpox	—	1	—	3	—	—	—	—	—	—
Diphtheria (including Membranous Croup)	45	36	57	26	16	14	27	38	21	65
Erysipelas	35	22	32	12	28	26	13	26	18	13
Scarlet Fever	219	388	229	28	41	55	65	87	55	55
Typhoid Fever	1	2	—	1	—	—	—	1	—	—
Paratyphoid Fever	—	2	—	—	—	—	—	1	—	5
Puerperal Fever ...	3	—	1	4	6	8	7	10	4	3
Puerperal Pyrexia..	2	18	10	5	12	4	3	5	7	19
Poliomyelitis	—	—	4	—	2	—	—	2	—	1
Pulmonary Tuberculosis	37	37	47	42	53	41	40	31	63	67
Other forms of Tuberculosis	20	31	21	23	13	19	20	22	20	19
Ophthalmia Neonatorum	9	1	9	7	10	3	6	3	8	6
Measles	25	207	144	93	421	11	21	337	134	86
Encephalitis Lethargica	1	2	—	5	1	—	1	2	—	—
Malaria	—	1	1	—	—	—	—	—	—	—
Pneumonia	18	69	69	76	63	66	30	31	31	56
Chickenpox	176	67	218	105	182	12	2	—	7	4
German Measles ...	1	10	1	—	4	—	1	—	9	—
Bacillary Dysentery	—	—	10	—	—	—	—	—	—	—
Cerebro-spinal Meningitis	—	—	—	1	1	2	—	1	—	1
Polio Encephalitis	—	—	—	—	—	—	1	—	—	—
Totals ...	593	893	583	431	853	261	237	597	377	400

NOTE:—Measles and German Measles were notifiable only from 1923 to June, 1937.

Table 11.

INFECTIOUS DISEASES NOTIFIED BY DOCTORS, 1937.

DISEASE.	AGE INCIDENCE.										WARD INCIDENCE.											Cases removed to Hospital	Tot. dths.
	0-1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	65 and over	Total	Park	Crosby	East	Town	West	Burnby	Frodingham	Asby		
Scarlet Fever	—	1	—	5	6	26	11	3	1	2	—	—	55	15	3	1	6	5	5	4	16	44	—
Diphtheria	—	—	1	2	4	33	13	3	6	3	—	—	65	15	5	19	3	10	2	1	10	60	2
Pulmonary Tuberculosis	—	—	—	—	—	1	2	12	31	12	6	3	67	9	8	5	8	8	8	15	6	—	29
Other forms of Tuberculosis	—	1	2	2	—	6	2	—	1	3	2	—	19	4	1	4	2	1	3	2	2	—	3
Chickenpox	—	—	—	—	—	4	—	—	—	—	—	—	4	3	—	—	—	1	—	2	—	—	—
Measles	3	11	15	24	23	10	—	—	—	—	—	—	86	13	10	20	14	6	7	13	3	1	—
Erysipelas	7	1	—	—	—	—	1	—	2	1	7	1	13	3	—	—	3	2	—	5	—	3	1
Pneumonia	—	4	3	1	2	5	6	2	10	5	7	4	56	5	1	3	11	3	9	16	8	—	17
Ophthalmia Neonatorum	6	—	—	—	—	—	—	—	—	—	—	—	6	—	—	2	—	1	—	2	1	—	—
Puerperal Fever	—	—	—	—	—	—	—	—	3	—	—	—	3	—	—	1	1	—	1	1	1	—	—
Puerperal Pyrexia	—	—	—	—	—	—	—	—	13	6	—	—	19	3	1	2	1	2	5	2	3	8	—
Poliomyelitis	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—
Paratyphoid B	—	—	—	—	1	—	1	—	3	—	—	—	5	—	—	1	—	2	1	—	1	5	—
Paratyphoid A	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—
Cerebro-spinal Meningitis	16	19	21	34	36	86	36	20	70	32	22	8	400	70	29	58	51	41	40	61	50	123	1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	53

NOTES:—Puerperal Fever ceased to be a notifiable disease in the 40th week of the year. Thereafter all cases of febrile puerperium became notifiable as "Puerperal Pyrexia."

Measles and German Measles ceased to be compulsorily notifiable in Scunthorpe on June 25th, 1937.

Table 12.

TOTAL MONTHLY INCIDENCE OF ALL KNOWN CASES OF INFECTIOUS DISEASE.

Month	Diphtheria	Measles	Pneumonia	Scarlet Fever	Chickenpox	Erysipelas	Puerperal Fever	Puerperal Pyrexia	Mumps	German Measles	Ophth. Neon	Whooping Cough	Polio Myelitis	Cerebro- spinal Meningitis	Paratyphoid Fever	Total
Jan.	4	171	15	8	—	1	1	2	13	—	1	—	—	—	—	202
Feb.	4	47	8	1	—	—	1	—	12	—	2	—	—	—	—	75
March	8	—	3	8	—	2	—	1	27	—	—	—	—	—	—	36
April	3	2	1	—	1	—	—	3	15	1	—	—	—	—	—	36
May	3	3	1	2	14	—	—	1	2	—	—	—	—	—	—	39
June	7	—	1	1	105	—	—	1	8	—	—	—	—	—	—	120
July	5	—	6	4	141	1	—	2	1	—	1	—	—	—	—	167
Aug.	3	1	2	1	5	1	1	3	—	—	—	—	—	—	—	19
Sept.	5	—	3	5	2	—	—	2	—	—	—	—	—	1	—	18
Oct.	10	—	2	8	7	—	—	1	—	—	—	1	—	—	3	32
Nov.	2	—	4	10	9	4	—	—	—	—	1	3	1	—	—	34
Dec.	11	—	10	7	2	4	—	3	—	—	1	2	—	—	2	42
Totals	65	225	56	55	286	13	3	19	78	1	6	6	1	1	5	820

Table 13.

INFECTIOUS DISEASES NURSE'S VISITS, 1937.

	No. of cases visited.	No. of visits paid.
Scarlet Fever	55	174
Ophthalmia Neonatorum	6	291
Pneumonia	56	148
Diphtheria	65	217
Erysipelas	13	67
Whooping Cough	6	16
Chickenpox	267	592
Measles	225	669
German Measles	1	2
Mumps	77	348
Puerperal Fever	3	3
Puerperal Pyrexia	19	37
Cerebro-Spinal Meningitis	1	1
Discharging Eyes	2	23
Paratyphoid B.	5	9
Poliomyelitis	1	1
Queries, observations, contacts	68	113
	<hr/>	<hr/>
Total ...	870	2711
	<hr/>	<hr/>

Table Showing Details of Cases of Puerperal Fever and Pyrexia in 1937.

Case No.	Age	Married or Single	Date of Birth of Child	Date of Onset	Date of notification	Pyrexia or Fever	Service requested on Notification	Date of receipt of Notification	Date of admission to Hospital	Remarks
1	35	Married	27-12-36	31-12-36	2-1-37	Pyrexia	All facilities	4-1-37	—	Recovered
2	28	Married	?	12-1-37	14-1-37	Fever	Admission to Hospital	18-1-37	14-1-37	Recovered
3	24	Married	6-1-37	17-1-37	18-1-37	Pyrexia	All facilities	18-1-37	—	Recovered
4	21	Married	26-1-37	30-1-37	30-1-37	Fever	All facilities	1-2-37	—	Recovered
5	28	Married	15-3-37	15-3-37	16-3-37	Pyrexia	Admission to Hospital	19-3-37	16-3-37	Recovered
6	22	Single	1-4-37	12-4-37	12-4-37	Pyrexia	All facilities	12-4-37	—	Recovered
7	35	Married	31-3-37	13-4-37	14-4-37	Pyrexia	All facilities	14-4-37	—	Recovered
8	40	Married	3-4-37	6-4-37	17-4-37	Pyrexia	Admission to Hospital	21-4-37	16-4-37	Recovered
9	36	Married	30-4-37	2-5-37	4-5-37	Pyrexia	All facilities	5-5-37	—	Recovered
10	25	Married	3-6-37	7-6-37	9-6-37	Pyrexia	Admission to Hospital	14-6-37	9-6-37	Recovered
11	41	Married	4-7-37	12-7-37	15-7-37	Pyrexia	All facilities	15-7-37	—	Recovered
12	20	Married	?	?	22-6-37	Pyrexia	All facilities	12-7-37	—	Recovered
13	30	Married	20-7-37	25-7-37	28-7-37	Pyrexia	Admission to Hospital	28-8-37	27-7-37	Recovered
14	40	Married	26-7-37	6-8-37	7-8-37	Pyrexia	All facilities	9-8-37	—	Recovered
15	24	Married	15-7-37	19-7-37	24-8-37	Pyrexia	Admission to Hospital	24-8-37	19-7-37	Recovered
16	34	Married	14-8-37	23-8-37	31-8-37	Fever	All facilities	1-9-37	—	Recovered
17	34	Married	?	3-9-37	6-9-37	Pyrexia	Admission to Hospital	7-9-37	5-9-37	Recovered
18	23	Married	1-9-37	10-9-37	10-9-37	Pyrexia	All facilities	13-9-37	—	Recovered
19	29	Married	28-9-37	3-10-37	4-10-37	Pyrexia	All facilities	4-10-37	—	Recovered
20	23	Married	?	27-11-37	29-11-37	Pyrexia	All facilities	30-11-37	—	Recovered
21	28	Married	30-11-37	3-12-37	6-12-37	Pyrexia	Admission to Hospital	7-12-37	5-12-37	Recovered
22	20	Married	24-12-37	28-12-37	29-12-37	Pyrexia	All facilities	30-12-37	—	Recovered

Table 14.

LABORATORY WORK.

Specimens examined in the Public Health Department:—

	1933	1934	1935	1936	1937
For Diphtheria Bacilli	147	154	348	213	488
For Tubercle Bacilli	32	18	15	53	47
For Venereal Diseases	—	—	—	53	181
Cerebro-spinal Fluid	3	—	—	—	—
Hairs for Fungi	—	—	—	1	—
For Streptococci	—	—	—	2	—
Other Examinations	2	2	8	11	9
Totals ...	184	174	371	333	725

Specimens sent away for examination:—

	1933	1934	1935	1936	1937
For Venereal Diseases (from Doctors and Clinic)	464	466	570	501	540
For Widal Reaction	4	1	2	2	6
Cerebro-spinal Fluid	1	—	3	2	—
Faeces for Dysentery Bacilli	—	—	—	1	—
Urine for B. Coli	—	—	—	1	—
For Tubercle Bacilli (T.B. Dispensary)	126	81	83	85	169
Faeces for Enteric Bacilli	2	1	—	—	—
For Diphtheria Virulence	—	—	5	—	—
Milks	32	40	60	24	31
Drinking Water (sent by Health Dept.)	2	—	2	—	6
Swimming Bath Water	—	—	—	—	2
Totals ...	631	589	725	616	754

Table 15.

TUBERCULOSIS—1937.

Age Periods.	NEW CASES NOTIFIED.				DEATHS.			
	Pulmonary		Non-		Pulmonary		Non-	
			Pulmonary				Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year ...	—	—	—	—	—	—	—	—
1—5 years ...	—	—	3	2	—	—	1	—
5—10 years ...	—	1	4	2	—	—	—	—
10—15 years ...	—	2	1	1	—	—	—	—
15—20 years ...	6	6	—	—	2	2	1	—
20—25 years ...	2	10	—	—	—	5	—	—
25—35 years ...	11	7	1	—	3	4	—	—
35—45 years ...	8	5	2	1	4	2	—	—
45—55 years ...	2	2	1	—	3	1	1	—
55—65 years ...	—	2	1	—	1	1	—	—
65 and upwards	1	2	—	—	—	1	—	—
	30	37	13	6	13	16	3	—

3 Cases of Tuberculosis were not notified prior to death.

A Decade of Tuberculosis.

Year.	New Cases			Cases on Borough Register.		Deaths.		Total.
	Pul- monary.	Non-	Total.	Pul- monary.	Non-	Pul- monary.	Non-	
		Pul-			Pul-		Pul-		Pul-
1928 ...	36	21	57	166	107	15	4	19
1929 ...	37	31	68	144	102	18	4	22
1930 ...	47	21	68	177	117	17	8	25
1931 ...	42	23	65	162	99	30	10	40
1932 ...	53	13	66	174	80	21	10	31
1933 ...	41	19	60	160	72	24	6	30
1934 ...	40	20	60	155	79	26	9	35
1935 ...	31	22	53	143	83	18	8	26
1936 ...	63	20	83	177	65	15	8	23
1937 ...	67	19	86	179	69	29	3	32

Table 16.

RETURN OF DEFECTS FOUND IN THE COURSE OF SCHOOL MEDICAL INSPECTION.

(This includes a number of school children from outside the Borough attending local schools).

DEFECT	Referred for treatment.	CODE GROUPS.		SPECIALS.	
		Requiring to be kept under observation but not referred for treatment.	Referred for treatment.	Requiring to be kept under observation but not referred for treatment.	
Skin					
Scabies	4	—	—	—	
Impetigo	1	—	—	—	
Other Diseases (non-tubercular)	1	—	—	—	
Eye					
Blepharitis	8	—	—	—	
Defective Vision ...	98	13	—	—	
Squint	22	2	—	—	
Ear					
Defective Hearing...	7	—	—	—	
Otitis Media	3	—	—	—	
Other Ear Diseases	13	—	3	—	
Nose and Throat					
Chronic Tonsilitis ...	104	8	5	—	
Adenoids	5	—	1	—	
Chronic Tonsilitis and Adenoids	7	1	1	—	
Other conditions ...	3	1	1	—	
Heart and Circulation					
Heart Disease					
Organic	24	3	—	—	
Functional	12	2	—	—	
Lungs.					
Bronchitis	5	4	—	—	
Other non-tubercular Diseases	1	1	—	—	
Tuberculosis					
Pulmonary					
Suspected	7	4	—	—	
Non-Pulmonary	—	1	—	—	
Nervous Conditions ...	4	3	—	1	
Deformities	3	—	—	—	
Other Defects and Diseases	6	—	—	2	

Number of Normal Children (no Defects): 158 Boys; 146 Girls.

BOROUGH OF SCUNTHORPE. REPORTS ON ANALYSES OF DRINKING WATERS, 1937.

Sample from Taken on	Chapel Street. 29-7-37	Chapel Street. 6-8-37 40 2.50	Well at Old Park Farm 6-8-37 163.0 13.2	Sherwood Vale. 24-11-37	Brumby. 24-11-37	Ashby High St. 15-12-37	Rising Main Risby Warren Waterworks. 30-12-37	Rising Main Wresle Waterworks. 30-12-37
Total Solids, 180° C.								
Combined Chlorine ...								
Equivalent to Sodium Chloride		4.1	21.75					
Nitric Nitrogen		0.20	2.2					
(Nitrates)								
Nitrous Nitrogen		Nil	trace					
(Nitrates)								
Albuminoid Nitrogen		0.0048	0.0144					
Ammoniacal Nitrogen		Nil	0.0044					
Total Hardness		27.5	80.0					
Temporary Hardness...		13.5	30.0					
Permanent Hardness		14.0	50.0					
Free Chlorine		Nil						
Oxygen absorbed in 4 hrs., at 27° C. ...		0.033	0.211				0.08 pts/mill.	Nil
(All figures are in parts per 100,000)								
Number of Bacteria.								
On Agar in 48 hours								
at 22° C. per c.c.								
water						474	6	2
On Agar in 48 hours								
at 37° C. per c.c.								
water						148 present in 5 c.c.	2 Nil	0 Nil
Bacillus Coli in	1 25 per 100 c.c.	Nil in 100 c.c.	900 in 100 c.c.	Nil in 100 c.c.	3 in 100 c.c.		Nil	Nil
Inter- mediate type.		Nil					Nil	
Bacillus Welchii								
Remarks :		pH=8.0 "Hard water but pure."	pH=7.0 "Not fit for drinking" purposes"			"Unfit for human consump- tion"	Sample taken after exclusion from catchment of an open stream on the Warren. "Satisfactory"	"Satisfactory"

Contributed by Mr. W. Farrar, A.M.I.C.E., Borough Engineer and Surveyor.

HOUSING.

Total Number of new houses erected during 1937 (in Ward Distribution).

(1) By the Local Authority	...	...	...	...	...	68
(2) By other Local Authorities	...	...	...	...	...	Nil
(3) By other bodies or persons	...	...	...	...	...	690
Total						758

Ward distribution of the new houses erected in 1937 :—

Ward.	By Local Authority.	By other Bodies or persons.	Totals.
Park Ward	68	90	158
Crosby Ward	Nil	4	4
West Ward	Nil	162	162
Town Ward	Nil	8	8
East Ward	Nil	1	1
Brumby Ward	Nil	196	196
Frodingham Ward ...	Nil	114	114
Ashby Ward	Nil	115	115
	68	690	758

Number of houses erected during 1937 with Exchequer Grant under the Housing Acts (included in the above).

(1) By the Local Authority :

	Parlour.	Non-Parlour.	Total.
(a) for the purpose of Part II of the Act of 1925 ...	Nil	Nil	Nil
(b) for the purpose of Part III of the Act of 1925 ...	Nil	Nil	Nil
(c) to relieve overcrowding ...	Nil	Nil	Nil
(d) to replace houses demolished under the Act of 1930 ...	Nil	34	34
Total ...	Nil	34	34

(2) By other bodies or persons ... Nil Nil Nil

Future Policy with reference to general housing situation.

A scheme is in progress and nearing completion for the erection (by Contract) of 50 houses on the Crosby Housing Estate under the 1936 Act without State Assistance.

The Council have received the approval of the Ministry of Health to the erection of a further 66 houses on the Crosby Housing Estate under the 1936 Act, without State Assistance, and work on the roads and sewers is in progress, the Ministry having given their sanction to the necessary loan for the work. Some delay has been caused in the erection of these houses owing to the partners in the Firm whose tender had been accepted and approved by the Ministry of Health, having dissolved partnership, but a commencement was made on 11th January, 1938.

Loan sanction has also been given by the Ministry of Health for the construction of roads and sewers for 30 houses under the 1936 Housing Act on the Crosby Housing Estate for the relief of overcrowding. The types of these houses have yet to be agreed by the Council and the Ministry and the erection of the houses should be commenced in 1938.

During 1937 the Council, with the approval of the Ministry, acquired two parcels of land for Housing Purposes under the Housing Act, 1936, one situate off the Ashby Road at Old Brumby, containing an area of 15.45 acres, sufficient to accommodate 186 houses, and the other of 4.8 acres on Bottesford Road, Ashby, which will accommodate 60 houses.

RIVERS AND STREAMS.

Bottesford Beck is the only stream of importance in the area. It drains water from the Ironstone Mines, and receives sewage effluents from the Sewage Works of the Corporation and effluents from the various Iron and Steel Works.

The Beck, the cleansing of which was formerly carried out mainly by or at the expense of the Council and the Ironmasters, and to a small extent by riparian owners, has now been made a "Main River" and therefore comes under the direct control of the Trent Catchment Board.

No complaint of any pollution of the stream has been received from the Court of Sewers, Catchment Board or other source.

SEWERAGE AND SEWAGE DISPOSAL.

Summary of present methods of sewage disposal.

There are at present four areas of drainage and sewage:—
(1) Scunthorpe and Crosby, (2) Brumby and Frodingham, (3) Ashby, and (4) Santon.

Scunthorpe and Crosby.

The sewage from this area is dealt with at Sewage Disposal Works situate at the extreme east of the area, North of the London and North Eastern Railway line to Grimsby. The works consist of grit chambers, screening and detritus tanks, storm water tanks, four settling tanks and two sludge tanks. The

sludge is pumped from the various tanks and distributed by a system of irrigation on to land adjoining the works, which the Council farm. From the settling tanks the sewage passes over sixteen percolating filters, thence to a humus tank and the effluent is finally discharged into Bottesford Beck.

The sewerage system of this area is on the gravitation system with the exception of a small area beyond the Western ridge of the Borough, which drains to a pumping station on Doncaster Road, where the sewage is lifted to the high level gravitation sewers.

Brumby and Frodingham.

The drainage area includes Old Brumby, New Brumby, and Frodingham. Part of the area at Frodingham is below the ordinary sewerage level and two automatic compressed air ejectors situate on Alexander Road, lift the sewage from the low level to the high level sewers.

The Sewage Disposal Works for this area is situate in Old Brumby and comprises one screening and detritus tank, two settling tanks, three percolating filters and two sludge lagoons. The effluent receives partial land filtration through open channels and discharges into a small tributary of Bottesford Beck.

Ashby.

The sewerage system of this drainage area is on the gravitation principle with the exception of a comparatively small area beyond the Western ridge of the Borough which drains to a pumping station on Burringham Road, where the sewage is lifted to the high level gravitation sewers.

The Sewage Disposal Works situate on the South side of Ville Road, Ashby, comprise two screen and grit chambers, three continuous flow settling tanks, four percolating filters, two humus tanks, two storm water tanks and two sludge lagoons.

The effluent is discharged into Bottesford Beck.

Santon.

This drainage area, very small in extent, is in the extreme East of the Borough. It comprises 73 houses which can be regarded as temporary in view of their close proximity to large iron and steel works and the extensions which are likely to take place to those works.

The geographical position of the houses renders it impossible to connect them to the Scunthorpe Works, and, as previously mentioned, they may have to be removed.

41 of the houses drain to two settling tanks belonging to and cleansed by the Council, and the remaining 32 are dealt with at a small works of the Council consisting of a septic tank and filter.

The various works have been well maintained and have dealt satisfactorily with the sewage from the drainage areas..

The Sewage Pumping Stations at Burringham Road, Ashby, Doncaster Road, Scunthorpe, and the Ejector Station at Frodingham have been in regular operation during the year and have given satisfactory service.

Particulars of extension of sewerage during 1937.

During 1937, 4,866 lineal yards of new sewers were laid in various parts of the Borough.

These sewer extensions comprised :—

235	Lin. Yds. of	6" diam.	Robinson Road.
215	" "	6" "	Hemp Dyke Road.
280	" "	9" "	" " "
118	" "	6" "	Avenue Vivian.
104	" "	9" "	" "
450	" "	9" "	to Sherwood Vale.
590	" "	9" "	Skippingdale Road.
30	" "	9" "	Grosvenor Street.
170	" "	9" "	Scotter Road.
173	" "	12" "	Minster Road.
33	" "	9" "	" "
327	" "	12" "	Lodge Road.
360	" "	12" "	Moors Road.
313	" "	12" "	Lodge Farm Estate.
143	" "	9" "	Burn Road.
194	" "	12" "	Doncaster Road.
419	" "	9" "	" "
70	" "	9" "	Oxford Street.
47	" "	9" "	Brian Avenue.
125	" "	9" "	Priory Crescent.
154	" "	9" "	St. Margaret's Walk.
106	" "	9" "	Angerstein Road.
210	" "	9" "	West Common Gardens.

4,866 Lin. Yds.

Progress made in improving the character and sufficiency of arrangements for drainage, sewerage and sewage disposal in all parts of the area.

The construction of the new Main Sewerage and Sewage Disposal Scheme for the reorganisation of the sewerage of the Borough has made good progress.

On the new sewers approximately eighty per cent. of the value of the work to be done has been carried out. About $6\frac{1}{2}$ miles of sewers varying from 12" to 60" diameter have been laid, made up as follows :—

682 Lin. Yds. of 60" diameter sewer.					
2,420	"	"	51"	"	"
127	"	"	48"	"	"
1,082	"	"	45"	"	"
247	"	"	42"	"	"
873	"	"	36"	"	"
697	"	"	33"	"	"
67	"	"	30"	"	"
942	"	"	27"	"	"
413	"	"	24"	"	"
1,620	"	"	21"	"	"
1,435	"	"	18"	"	"
450	"	"	15"	"	"
315	"	"	12"	"	"
<hr/>					
11,370 Lin. Yds.					
<hr/>					

The construction of the **new Sewage Disposal Works** is well in hand and approximately one half of the value of the work to be done has been carried out.

Work is in progress on the whole of the various sections of the work and the construction of the settling tanks and percolating filters is nearing completion and the placing of the filtering media has been commenced. Some delay has occurred owing to bad weather during the winter and difficulty in obtaining sufficient labour, deliveries of steel reinforcements and filtering media.

During 1937 owing to building development commencing on the low level land situate on the Western boundary of the Borough and known as the Lodge Farm Estate, the Council gave consideration to alternative schemes for the disposal of the sewage from this particular area. This Estate also extends beyond the Borough boundary into the area of the Glanford Brigg Rural District Council and the owners submitted layout plans to the Rural District Council for the development of that part of their estate also. The Rural District Council were at the time considering a scheme for the sewerage of the village of Gunness, etc., about 1.7 miles further West and on submitting their proposals to the Ministry of Health, the Ministry asked them to approach the Corporation to ascertain if they were interested in a joint scheme to the West with outfall to the River Trent or any other alternative joint scheme.

Conferences took place between the two Local Authorities and alternative schemes were prepared jointly by their Engineers.

It was ultimately decided to go forward with a joint scheme for dealing with the sewage from development on the Lodge Farm Estate. The joint scheme comprised the construction of a Pumping Station within the Borough and the lifting of the sewage

to the existing pumping station of the Corporation on Doncaster Road and thence into the Corporation's high level gravitation sewers. It was considered that a small joint scheme of this kind would meet the case until it was seen how far development would take place, rather than risk a large expenditure on a scheme which might be unnecessary if the development did not proceed to the extent to which the owners of the land anticipated.

The Rural District Council were, however, asked by the Corporation to plan their scheme for the sewerage of Gunness so that it would be possible, in the event of the need arising, for both Local Authorities to join in a further scheme for the taking of the sewage from the development on the Western slope of the ridge within the Borough (at present dealt with at the existing pumping station on Doncaster Road), the Lodge Farm Estate and other lands adjoining thereto situate within the Borough together with the land between the Borough boundary and Gunness within the area of the Rural District, to the West with outfall to the River Trent.

The small joint scheme previously mentioned received the approval of the Ministry of Health and the work is in progress.

Houses in the Borough not connected with main drains.

The number of houses in the Borough not connected to the sewerage system of the District is 152, particulars with regard to which are as follows:—

Situation.	No.	Remarks.
Dawes Lane, Santon.	41	Situate in the extreme East of the Borough and as previously stated can be regarded as temporary in view of their close proximity to large iron and steel works and the extensions which are likely to take place to those works. The geographical position of the houses renders it impossible to connect them to the Scunthorpe Sewage Disposal Works.
Scotter Road and Ferry Road, north of Doneaster Road.	53	By a compromise between the Council and the Land owners with the approval of the Ministry of Health in 1923 it was agreed that if houses at a density of $4\frac{1}{2}$ to the acre were permitted the Council should be under no obligation for public services.
Lodge Farm, Scotter Road.	2	It is understood that the owners contemplate the demolition of this property in the near future.
Bottesford Road.	3	These houses are some 200 yards distant from the public sewer to which it is impossible to connect them owing to the levels of the site being too low. The nearest existing public sewer is too shallow to permit of the connection of this property.

Situation.	No.	Remarks.
Sandhouse Farm, Brumby.	1	The nearest existing public sewer is too shallow to permit of the connection of this property.
Scotter Road, near railway viaduct south of Doncaster Road.	2	Isolated position. No public sewer in the neighbourhood.
Brunby Grove Farm, Scotter Road.	3	Isolated position. No public sewer in the neighbourhood.
Scotter Road, near southern boundary of the Borough.	5	Isolated position. No public sewer in the neighbourhood.
Park Farm, Crosby.	3	Isolated position. No public sewer in the neighbourhood.
Conesby Farm, off Normanby Road.	5	Isolated position. No public sewer in the neighbourhood.
Game-Keeper's Lodge, Skippingdale Plantation, Crosby.	1	Isolated position. No public sewer in the neighbourhood.
Game-Keeper's Lodge Crosby Warren.	1	Isolated position. No public sewer in the neighbourhood.
Orb Lane and St. Vincent's Avenue, off Normanby Road.	14	Isolated position. No public sewer in the neighbourhood.
Ashby Ville Hotel, Brigg Road.	1	Isolated position. No public sewer in the neighbourhood.
Maniwell Cottages, Brigg Road.	7	Isolation position. These houses are the subject of a demolition order.
South Grange Farm, Ashby.	2	Isolated position. No public sewer in the neighbourhood.
North Grange Farm, Ashby.	1	Isolated position. No public sewer in the neighbourhood.
Manor Farm, off Burringham Road, Ashby.	3	Isolated position and drain to a small private sewage works in the same ownership.
Brat Hill, South of Ville Road, Ashby.	1	Isolated position and too low to drain to nearest sewer.
Tea Pot Hall, South of Burringham Road, Ashby.	1	Isolated position. No public sewer in the neighbourhood.
Goosehole, East end of North Lincoln Road.	2	Isolated position. No public sewer in the neighbourhood.

WATER SUPPLY.

Summary of present arrangements for Water Supply.

The water supply of the Borough is derived from boreholes and other underground works sunk in the Lincolnshire Limestone from undertakings owned by (1) the Council, at Risby Warren, (2) the Council, at Appleby, (3) the North Lindsey Water Board at Wressle, and (4) the North Lincolnshire Iron Company, Ltd., at Clap Gates, Appleby.

RISBY WARREN.

The yield of this gathering ground is obtained from two boreholes and a well on the Elves Estate, and also from a well somewhat loosely designated as the "Deep Well" (about 60 feet deep) sunk on adjoining land purchased from Lord St. Oswald.

The water abstracted from the boreholes and wells is discharged into an underground chamber known as the "Catchment."

Dividing the two estates is an open stream whose source of supply originates from blow wells in its bed. In Summer this stream is dry but in Winter it gives up a fair volume of water which, when used, is received into the above mentioned "Catchment."

From this Catchment the water is pumped through a rising main into three covered service reservoirs at Sawcliffe Hill on Winterton Road.

APPLEBY.

The water at this undertaking is obtained from a well with a borehole sunk in the bottom of same and a borehole at the back of the pump house.

The water from here is pumped into a small covered service reservoir known as Frodingham reservoir, situate on the hill at Low Santon and having a capacity of 110,000 gallons.

WRESSLE.

This supply is derived from two boreholes on Wressle Farm, Broughton. The water abstracted from the boreholes is discharged into a covered-in settling tank from which it is pumped to a covered service reservoir at Sawcliffe Hill (situate alongside the high level reservoir of the Corporation referred to later) for the supply to Scunthorpe and also to a covered service reservoir at Stonewall Plantation, Raventhorpe, for the supply to Brigg Urban District and parts of the Brigg Rural District east of Scunthorpe.

NORTH LINCOLNSHIRE IRON COMPANY.

The Corporation purchase a bulk supply of water from this Company under an agreement which expires on the 25th March, 1939.

The undertaking, situate at Clap Gates, Appleby, derives its supply from three original boreholes and a new borehole sunk a short time ago near to the pumping station.

The water from the boreholes discharges into a common sump (open) from which it is pumped through a rising main to an open reservoir at High Santon built in 1919 and having a capacity of $4\frac{3}{4}$ million gallons.

AREA OF SUPPLY.

The statutory area of supply embraces the Borough and that part of the Brigg Rural District which was formerly the Urban District of Roxby-cum-Risby, and the Corporation also supply a number of properties situate in the area of the Rural District of Brigg at Appleby and Neap House Road.

In addition to the above, the Corporation, on behalf of the North Lindsey Water Board, afford a supply through their mains for the undermentioned Parishes of the Brigg Rural District :—

To the north of the Borough—

Winterton.
Burton.
Flixborough.

To the west of the Borough—

Gunness and Brumby.
Burringham.
East Butterwick.

To the south of the Borough—

Bottesford.
Messingham.

DISTRIBUTION.

The water taken from each of the sources of supply is distributed as follows :—

That from Risby Warren flows by gravitation from the Corporation's three service reservoirs at Sawcliffe Hill, and feeds the larger part of the area of supply.

These three reservoirs, although described as being situate at Sawcliffe Hill, are not all at the same altitude, or grouped together; what is known as the "low level" reservoir (750,000 galls. capacity) having a top water level of 220 feet above Ordnance Datum, is situate in its own grounds some 400 yards north of the Borough boundary, while the reservoir designated the "high level" reservoir (a million galls. capacity) has a top water level of 253 feet above Ordnance Datum, and is situate 1,000 yards north of the low level reservoir, and has alongside it the third and smallest reservoir (200,000 galls. capacity) and also the reservoir belonging to the North Lindsey Water Board, which

has an altitude similar to that of the Corporation's high level reservoir.

The altitude of the three high level reservoirs (2 Corporation and one the Water Board) enables them, if so required to give a supply of adequate pressure over the whole area supplied by the Corporation, and the larger of the two Corporation reservoirs and that of the Water Board (**fed from Wressle**) are used for supplying the higher and larger portion of the Borough and the Parishes of the Brigg Rural District previously mentioned, while the smaller is used for the supply to Roxby-cum-Risby, Winterton and Burton.

The supply from these high level reservoirs is a combination of the Risby Warren and Wressle waters but is not so mixed until it has been discharged from the reservoirs into the mains.

The low level reservoir is mainly used for affording a supply to the ironstone mines adjoining Winterton Road, and is occasionally used for the supply to the bottom end of Scunthorpe from about Manley Street to Scunthorpe Church Square.

The reservoir at Low Santon, into which the water from the Corporation's undertaking at Appleby is discharged, is used for the feeding, by gravity, of that part of the Borough situate at the lower level, the altitude of the reservoir being 35 feet below that of the high level reservoirs at Sawcliffe Hill.

The water from the reservoir of the North Lincolnshire Iron Company, Ltd., at High Santon, gravitates to the North Lincolnshire Iron Works, now the Appleby-Frodingham Steel Company's works, and the Council take their bulk supply from this gravitation main of the Company at Santon Brickworks and the bridge over Dawes Lane near the Appleby Steelworks. This bulk supply discharges into that water main of the Corporation which takes its feed from the Corporation's Low Santon reservoir. The top water level of the Company's reservoir is 11 feet below the level of the Corporation's reservoir at Low Santon.

The supply, therefore, to that part of the Borough situate at the lower level is a combination of the Corporation's and the North Lincolnshire Iron Company's water, and in order to spread this combined supply over as large an area of feed as possible when necessity arises, a boosting pumping plant which has been installed on Dawes Lane is put into operation to boost up the pressure of the water.

The trunk and distribution mains are in good condition, and vary in size from 15" to 3" diameter, with a total length of about 60 miles.

Capacities and Top Water Levels of the Covered Service Reservoirs.

No.	Name or Description of Reservoir.	Owner.	Situation.	Source from which fed.	Capacity.	Top Water Level.
					Gallons.	Feet above O.D.
1.	High Level Reservoir.	North Lindsey Water Board.	Sawcliffe Hill.	Wressle.	1,000,000	253
2.	High Level Reservoir.	Scunthorpe Corporation.	do.	Risby Warren.	1,000,000	253
3.	Small High Level Reservoir.	do.	do.	do.	200,000	253
4.	Low Level Reservoir.	do.	do.	do.	750,000	220
5.	Frodingham Reservoir.	do.	Low Santon.	Appleby.	110,000	218

NORTH LINCOLN OPEN RESERVOIR.

The reservoir, approximately 270 feet square and 12 feet deep, is situate at High Santon, and is constructed in embankments lined with concrete.

Reputed Capacity ... $4\frac{3}{4}$ million gallons.

Top Water Level ... 207 feet above Ordnance Datum.

CHEMICAL TREATMENT.

Corporation's Risby Warren Water.

The water taken from Risby Warren is treated there by means of a Paterson Pulser Chloronome which delivers chlorine solution to the suction of the pump lifting the whole of the water to the covered service reservoirs. This pump works at a constant rate of 30,000 gallons per hour and the Chloronome is in operation during the whole of the time the pump is working. The dose of concentration at present being administered is one part per five millions. The Medical Officer of Health saw the plant in operation and at this rate at his visit on the 29th December, 1937.

Corporation's Appleby Water.

This water is not treated at present. It is proposed to install a plant for the chlorination of this water in the near future.

North Lindsey Water Board's Water at Wressle.

This water is not treated.

North Lincolnshire Iron Company's Water.

This water is treated at the pumping station at Clap Gates by means of a Paterson Pulser Chloronome which delivers chlorine solution near the suction of the pump lifting the whole of the water to the open service reservoir.

The Medical Officer of Health at his visit on the 11th January, 1938, had the dose increased from 0.33 part per million to 1 part per million to counteract conditions found on bacteriological analysis of water samples from this supply.

GEOLOGICAL FORMATION OF CATHERING GROUNDS AND BORES.

Risby Warren.

Bores at Risby Warren were sunk by me during 1923-28. The sources from which the supply is derived are illustrated on the attached chart.

RISBY WARREN WELLS.

No. 1 Bore (12ins. diam.) Ground Level 78ft. O.D.		No. 2 Bore. Ground Level 74.16 O.D.		No. 3 Bore. Ground Level 62.33 O.D.		"South Bore Catchment." Ground Level 57.66 O.D.		"Deep Well" 60ft. deep on site of an 86ft. borehole. Ground Level 62.93 O.D.	
	ft. ins.		ft. ins.		ft. ins.		ft. ins.		ft. ins.
Sand	14 6	Turf	1 0	Turf	1 0	Sand	3 6	Sand	19 0
Clay	6 6	Sand	5 0	Dirty dry sand	3 0	Gravel	4 6	Sand and stone	7 0
Ponton Limestone	13 0	Grit	5 0	Silty wet peat	3 0	Clay	1 6	Ponton sandstone	9 0
Dark Rock	19 0	Loose yellow limestone	2 0	Loose yellow limestone	10 0	Limestone	6 0	Clay	6 6
Hard Gritty Shale	6 0	Yellow limestone	5 0	Yellow clay	1 0	Soft clayey limestone	3 6	Sandstone	12 6
Dark rock with iron- stone bands	6 0	Soft yellow grit	2 0	Yellow limestone	2 0	Soft limestone	5 0	Clay and stone	3 6
Ironstone	3 0	Hard grey stone	2 0	Very hard blue rock	6 0	Hard limestone	5 0	Rock	1 6
Blue rock	8 0	Soft grey clay	1 0	Soft blue rock	3 0	Hard dense limestone	7 0	Clay	4 6
Blue clay	9 0	Hard dark rock	1 0	Blue clay	1 0	Soft shaley limestone	3 0	Limestone	22 6
Brown shale and beds of open sandstone	6 0	Hard dark shale	6 6	Total depth	30 ft.	Hard limestone	4 0		
		Hard brittle rock	3 0			Clay and limestone	17 0	Depth of bore	86 ft.
		Grey gritty rock	2 6			Very hard rock	4 0		
		Hard blue clay	5 0			Soft clay	6 0		
		Hard grit and blue clay	2 6			Rocky limestone	2 0		
		Very hard blue rock	4 0			Blue clay	7 0		
		Very hard yellow and grey rock	5 0			Rocky limestone	1 0		
		Softer blue rock	1 6			Blue clay	1 0		
		Soft blue clay	2 6			Rocky limestone	10 0		
		Grit and stone	2 0			Total depth	91 ft.		
		Hard rock	2 6						
		Hard grit	1 0						

Main Water Supply

in cavity (55 feet from surface)	1 0
Hard grit and shale	3 0
Very hard fine sand- stone	4 0
Hard grit and shale	5 0
Blue clay and stone	5 0
Hard limestone	1 6
Water cavity	3
Dark blue clay and stone	6 3
Total depth	80 ft.

Appleby.

The strata here are similar to those found in borehole No. 2 on Risby Warren, see the previous chart.

Wressle.

The strata pierced in sinking the permanent two boreholes at Wressle were found to be :—

No. 1 BOREHOLE, situate at main Pump House, sunk in 1930.

Strata.	Thickness of stratum.		Total depths from the surface.	
	Feet.	Ins.	Feet.	Ins.
Soil	1	0	1	0
Yellow Sand	7	0	8	0
Dark Grey Clay	2	6	10	6
Yellow Sand	4	0	14	6
Dark Grey Clay	14	6	29	0
Dark Grey Clay and loose Limestone	4	0	33	0
Shale	3	0	36	0
Green Sand with bands of Shale ...	3	6	39	6
Dark Grey Clay	3	0	42	6
Grey Sandstone	6	4	48	10
Grey Sand	12	0	60	10
Limestone (Hard Grey)	6	0	66	10
Limestone (Soft Grey)	13	6	80	4
Dark Grey Limestone	8	7	88	11
Light Grey Limestone	3	7	92	6
Dark Grey Limestone	6	3	98	9
Dark Grey Shale and Limestone (mixed)	3	6	102	3
Dark Grey Limestone (very hard) ...	4	8	106	11
Grey Sandy Shale	3	6	110	5
Dark Grey Limestone	8	3	118	8
Dark Grey Shale		6	119	2
Grey Limestone	1	3	120	5
Grey Sandy Shale with bands of Limestone	8	7	129	0
Dark Grey Shale	1	0	130	0
and continuing.				

No. 2 BOREHOLE.

Strata.	Thickness of stratum.		Total depths from the surface.	
	Feet.	Ins.	Feet.	Ins.
Ground Level 8.33 above O.D.				
Soil	1	6	1	6
Yellow Sand	5	6	7	0
Brown Clay	8	0	15	0
Sandy Silt	3	0	18	0
Brown Clay	5	0	23	0
Limestone Gravel (coarse)		6	23	6
Limestone Gravel and Sand	2	6	26	0
Brown Clay	2	0	28	0
Loose Limestone	4	0	32	0
Grey Silty Clay	1	0	33	0
Limestone Gravel	1	6	34	6
Soft Sandstone	1	6	36	0
Hard Blue Stone	3	0	39	0
Hard Grey Blue Stone	7	0	46	0
Hard Grey Sandstone	5	0	51	0
Hard Grey Blue Stone	14	0	65	0
Very Hard Grey Stone	4	6	69	6
Green Clay		6	70	0
Very Hard Grey Stone	2	0	72	0
Blue Clay	3	0	75	0
Very Hard Grey Stone	5	0	80	0
Grey Clay	5	0	85	0
Grey Blue Stone (pebbly)	5	0	90	0
Brown Grey Stone	2	6	92	6
Grey Clay	1	0	93	6
Grey Blue Stone and Clay	13	6	107	0
Blue Clay	43	0	150	0

**NORTH LINCOLNSHIRE IRON COMPANY'S BORES AT
CLAP GATES.** Details supplied by the Company.

Borehole No. 5 in the north-west corner of field No. 444 and 600 yards west of pump house.

Surface level approx. 20 feet above O.D.

Sunk August 15th to October 9th, 1918.

Total depth 82 feet, diameter 12 ins. to 66 feet, $2\frac{1}{2}$ ins. bore from 66 feet to 82 feet.

Ponton limestone bed 26 feet 6 ins. thick in bottom of bore.

Borehole No. 6 in the south-east corner of field No. 444 and 300 yards west of pump house.

Surface level approx. 20 feet above O.D.

Situation, 325 yards south-west of borehole No. 5.

Sunk November 11th to December 19th, 1918.

Depth 117 feet, diameter 12 ins.

Ponton limestone bed 26 feet thick in bottom part of bore.

Borehole No. 7 adjoining pump house.

Surface level approx. 14 feet above O.D.

Situation, 617 yards south-east of borehole No. 5 and 317 yards east of borehole No. 6.

Sunk April 8th to May 6th, 1919.

Depth 140 feet, diameter 12 ins.

Ponton limestone bed 22 feet 6 ins. thick in bottom part of bore.

Borehole No. 8 near pumping station. Commenced August, 1935, completed May, 1936.

NORTH LINCOLNSHIRE COMPANY'S BORES AT CLAP GATES.

No. 5 BOREHOLE.

Strata.	Thickness of stratum.		Total depths from the surface.	
	Feet.	Ins.	Feet.	Ins.
Surface level approx. 20ft. above O.D.				
Soil	1	0	1	0
Ironstone		9	1	9
Grey Sand	5	3	7	0
Peat Bed	2	0	9	0
Soft Grey Clay	3	6	12	6
Firm Mottled Clay	1	0	13	6
Ponton Gravel	1	6	15	0
Dark Coloured Clay	1	6	16	6
Ponton Gravel (Full of Water)	2	6	19	0
Dark Gritty Clay	2	0	21	0
Bluish Limestone	1	6	22	6
Dark Blue Gritty Clay	2	0	24	6
Dark Sandy Limestone	2	6	27	0
Hard Dark Gritty Clay	1	6	28	6
Very Hard Limestone	1	0	29	6
Gritty Clay		6	30	0
Hard Dark Coloured Stone	1	0	31	0
Hard Blue Gritty Clay	1	6	32	6
Green Mottled Sandy Clay	2	6	35	0
Light Coloured Sandstone and Clay	3	0	38	0
Light Coloured Sandstone mixed with Ponton Grains	5	0	43	0
Dark Coloured Sandstone mixed with Ponton Grains	5	0	48	0
Black Sandy Clay	1	6	49	6
Sandstone and Clay	2	0	51	6
Very Hard Rock	3	0	54	6
Yellowish Coloured Ponton Lime- stone	4	0	58	6
Bluish Coloured Ponton Limestone	7	6	66	0
Ponton	15	0	81	0
Very Brittle Stone probably Kirton Ironstone	1	0	82	0

No. 6 BOREHOLE. N. Lincs.

Strata.	Thickness of stratum.		Total depth, from the surface.	
	Feet.	Ins.	Feet.	Ins.
Surface level approx. 20ft. above O.D.				
Soil	1	0	1	0
Grey Sand	7	0	8	0
Peaty Sand	1	6	9	6
Clean Gravel	1	6	11	0
Dark Clay	1	0	12	0
Grey Clay	4	0	16	0
Grey Gravel and Shells	1	6	17	6
Yellow Gravel and Shells	7	0	24	6
Ponton Gravel	3	0	27	6
Fine Grey Sand	3	0	30	6
Dark Silty Clay	3	6	34	0
Very Hard Rock (contg.)	1	6	35	6
Very Hard Grey Rock	2	6	38	0
Dark Clay and Shells	4	6	42	6
Green Clay	5	6	48	0
Soft Sandstone	2	0	50	0
Soft Sand and Clay	4	0	54	0
Hard Sandstone	3	0	57	0
Hard Grey Clay	1	6	58	6
Soft Sandstone and Clay	3	0	61	6
Very Hard Dark Rock	6	0	67	6
Hard Clay or Shale Bed	1	6	69	0
Hard Dark Rock	1	6	70	6
Hard Gritty Clay and Shells	4	6	75	0
Very Hard Brown Shale (contg.)	3	0	78	0
Light Coloured Silty Clay	2	0	80	0
Hard Sandstone	2	0	82	0
Very Hard Rock	2	0	84	0
Very Coarse Sandstone	2	0	86	0
Very Hard Coarse Sandstone Rock	4	0	90	0
Ponton Limestone Beds	26	0	116	0
Very Hard Brittle Rock	1	0	117	0

No. 7 BOREHOLE. N. Lincs.

Strata.	Thickness of stratum.		Total depths from the surface.	
	Feet.	Ins.	Feet.	Ins.
Surface level approx. 14 ft. above O.D.				
Soil	1	6	1	6
Grey Peaty Sand	8	6	10	0
Small Clean Gravel	1	6	11	6
Soft Warp Clay	7	6	19	0
Ponton Gravel	3	6	22	6
Greenish Clay or Bind with Fossils	14	6	37	0
Brownish Clay or Bind with Fossils	10	0	47	0
Very Hard Rock	3	0	50	0
Hard Sandstone	5	6	55	6
Hard Sandstone and Fossils ...	8	6	64	0
Dark Clay and Shells	4	0	68	0
Very Hard Rock	4	6	72	6
Hard Dark Clay and Shells ...	4	6	77	0
Hard Green Silty Clay	5	6	82	6
Hard Sandstone Rock	2	6	85	0
Hard Light Coloured Shale ...	2	0	87	0
Soft Sandstone and Clay Beds ...	5	0	92	0
Hard Sandstone	3	0	95	0
Very Hard Rock with thin Bed of Shale and Fossils	6	0	101	0
Very Hard Rock	1	6	102	6
Hard Dark Coloured Shale ...	4	0	106	6
Hard Brown Shale	3	0	109	6
Very Hard Light Coloured Sand- stone	3	6	113	0
Very Hard Brittle Rock	4	0	117	0
Ponton Limestone	22	6	139	6
Very Hard Rock		6	140	0

No. 8 BOREHOLE. N. Lines. Pumping Station.

Strata.	Thickness of stratum.		Total depths from the surface.	
	Feet.	Ins.	Feet.	Ins.
Soil		7		7
Brown Clay		5	1	0
Peat	1	4	2	4
Yellow Sand	3	8	6	0
Peaty Sand	4	1	10	1
Fine Sand containing very small pieces of Limestone		2	10	3
Clay Light Coloured	11	9	22	0
Gravel	3	0	25	0
Greenish Clay	11	8	36	8
Greenish Shale with Fossils and Pyrites	10	4	47	0
Hard Light Coloured Sandstone ...	2	0	49	0
Soft Sandstone	2	0	51	0
Coarse Sand	5	9	56	9
Hard Bound Grey Sand and Shells	6	3	63	0
Dark Shale	3	6	66	6
Limestone Rock and Fossils ...	3	0	69	6
Shale parting		3	69	9
Hard Sandstone and Fossils ...	1	3	71	0
Dark Clay and Shells	9	2	80	2
Green Sand	4	0	84	2
Grey Sand	3	10	88	0
Washed away	1	2	89	2
Hard Limey Rock	1	2	90	4
Dark Shale and Shells	2	10	93	2
Hard Limey Rock and Fossils ...	1	5	94	7
Dark Shale and Shells	1	8	96	3
Hard Limey Rock and Fossils ...	2	0	98	3
Dark Grey Shale and Shells ...	1	3	99	6
Hard Limey Rock and Fossils ...		7	100	1
Dark Grey Shale and Shells ...		4	100	5
Hard Limey Rock and Fossils ...	1	2	101	7
Dark Grey Shale and Shells ...	1	4	102	11
Soft Green Sandstone	3	7	106	6
Soft Grey Sandstone containing pieces of Lignite	3	6	110	0
Soft Grey Sandstone	2	6	112	6
Soft Sandy Clay	1	0	113	6
Limestone Ponton	28	1	141	7
Limestone Very Hard Kirton ...	3	2	144	9
Shale parting		10	145	7

(Continued on next page).

No. 8 BOREHOLE. N. Lines. Pumping Station.

Strata.	Thickness of stratum.		Total depths from the surface.	
	Feet.	Ins.	Feet.	Ins.
Limestone Very Hard Kirton ...	2	6	148	1
Shale	1	10	149	11
Limestone Very Hard Kirton ...	7	9	157	8
Dark Grey Shale	4	6	162	2
Limestone Very Hard Kirton with Fossils	4	6	166	8
Dark Grey Shale		6	167	2
Limestone Very Hard Kirton with Fossils	2	4	169	6
Shale parting		1	169	7
Limestone Kirton with thin bands of Shale		5	170	0
Shale		4	170	4
Limestone Very Hard Kirton ...	3	11	174	3
Shale	1	2	175	5
Limestone Very Hard Kirton ...	2	3	177	8
Shale	5	4	183	0

Particulars of change of public water supplies during 1937.

The works sanctioned by the North Lindsey Water Act, 1934, and the Scunthorpe and Frodingham Order of 1931, have been completed and taken over from the Scunthorpe Borough Council by the North Lindsey Water Board as and from the appointed day, viz:—31st March, 1937.

The Corporation are now obtaining water from this source as are also the other two Constituent Authorities mentioned in the Act, viz:—Glanford Brigg Rural District Council and the Brigg Urban District Council.

The works of the Board comprise two large diameter boreholes at Wressle, Broughton, and pumping stations there from which the water is lifted through rising mains to a new one million gallon covered-in service reservoir at Sawcliffe Hill, Roxby, and a half million gallon covered-in service reservoir at Stonewall Plantation, Raventhorpe.

The supply from the Sawcliffe Hill reservoir is used to supplement the supply to the Borough from the Corporation's own undertakings at Risby Warren and Appleby and also to afford a supply through the Corporation's mains to parts of the Glanford Brigg Rural District adjoining the Southern, Western and Northern boundaries of the Borough.

The reservoir at Stonewall Plantation is used for the supply to parts of the Glanford Brigg Rural District, East of the Borough and the Brigg Urban District.

New Mains.

The following new mains were laid in 1937 :—

120	Lin.	Yds.	4"	diam.	Portman Road.
120	"	"	4"	"	Priory Crescent.
190	"	"	4"	"	Skippingdale Road.
110	"	"	4"	"	Lydbrook Road.
90	"	"	4"	"	Warley Road.
60	"	"	4"	"	Fulbeck Road.
80	"	"	4"	"	West Common Gardens.
160	"	"	4"	"	Stocks Hill Road.
135	"	"	4"	"	Kathleen Avenue.
53	"	"	4"	"	Milton Road.
202	"	"	6"	"	Priory Lane.
80	"	"	4"	"	New Road off Warley Road.
200	"	"	6"	"	Cliffe Closes Road.
488	"	"	4"	"	Ville Road.
90	"	"	4"	"	Oxford Street.
30	"	"	4"	"	Comforts Avenue.
75	"	"	4"	"	Brian Avenue.
85	"	"	4"	"	Cornwall Road.
170	"	"	4"	"	Burn Road.
570	"	"	4"	"	Hemp Dyke Road.
260	"	"	6"	"	Avenue Vivian.
275	"	"	4"	"	Robinson Road.
150	"	"	4"	"	Moors Road.
325	"	"	4"	"	Lodge Road.
112	"	"	4"	"	Minster Road.
<hr/> 4,230 Lin. Yds. <hr/>					

Consumption.

The total quantity of water consumed in the Borough for domestic purposes during the year ended 31st December, 1937, was 303,789,800 gallons, equal to 19.5 gallons per head per day taking the population supplied at 42,700, and 59,989,000 gallons have been used for industrial purposes, equal to 3.8 gallons per head per day.

HOUSES WITHOUT TOWN'S WATER, DECEMBER, 1937.

6, Old Crosby	...	...	...	...	...	...	...	1
4, Ravendale Street	...	...	...	...	...	...	...	1
64, 66, 72, 74, 76, Ashby High Street	...	...	...	...	...	...	...	5
86, 91, 93, 95, 151, Ashby High Street	...	...	...	...	...	...	...	5
126, 128, 130, 132, Ashby High Street	...	...	...	...	...	...	...	4
36, Bottesford Lane	...	...	...	...	...	...	...	1
18, 19, Grange Lane	...	...	...	...	...	...	...	2
43, 45, Grange Lane	...	...	...	...	...	...	...	2
44, North Parade	...	...	...	...	...	...	...	1
31, Victoria Road	...	...	...	...	...	...	...	1
Leaning, Ferry Road (Town Water supply not available)	...	...	...	...	...	...	...	1
South Lodge, Ferry Road (Town Water supply not available)	...	...	...	...	...	...	...	1
North Farm Cottage (Tea Pot Hall) (Town Water supply not available)	...	...	...	...	...	...	...	1
North Grange Farm (Town Water supply not available)	...	...	...	...	...	...	...	1
New Houses, Scotter Rd. (Town Water supply not available)	...	...	...	...	...	...	...	6
Gooseholes	...	...	...	...	...	...	...	2
Clarke, East Lane (Town Water supply not available)	...	...	...	...	...	...	...	1
Viaduct Cottages (Water supply from Railway Co.)	...	...	...	...	...	...	...	2
Brumby Grove Farm and 2 houses	...	...	...	...	...	...	...	3
Park Farm Cottages	...	...	...	...	...	...	...	3
28, Crosby Road	...	...	...	...	...	...	...	1
Long, Old Mill House (Town Water supply not available)	1
Brat Hill (Town Water supply not available)	1
8, Alexandra Road	1

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MINISTRY OF HEALTH INQUIRIES DURING 1937.

The following Inquiries were held by the Ministry of Health :

- 3rd February, 1937.** Application for consent to borrow £55,555, for the erection and furnishing of Municipal Offices on a site situate between Laneham Street and Station Road.
- 15th June, 1937.** Application by the Glanford Brigg Rural District Council for an adjustment of minimum "takes" under the North Lindsey Water Act, 1934, in consequence of Winterton (which previously received its water supply from Scunthorpe Corporation) being deurbanised and included in the Rural District.
- 9th March, 1937.** Application for consent to borrow the sums of £15,000 and £942 for the purchase of land at the junction of Ashby Road and Kingsway, respectively for Public Park and Recreation Grounds.
- 9th July, 1937.** Appeal by Messrs. Spilman & Robertshaw against the refusal of the Borough Council to permit the development of land at Scotter Road.
- 12th October, 1937.** For approval of Town Planning Scheme.

REPORT OF THE CHIEF SANITARY INSPECTOR (MR. J. CALLACHER).

Conversion of Pail Closets to Water Carriage.

At the end of the year under review this very important public health measure which was started in 1920 by the introduction of a voluntary scheme of conversion whereby the property owner agreed to pay one half of the cost of conversion, was almost completed. Since that time 3,262 pail closets have been converted to water carriage without statutory action. During the year 26 pail closets were converted and 25 were abolished due to the demolition of unfit houses. There are now within the Borough 147 pail closets, 75 of which are at present outside the sewered area, leaving 42 remaining to be converted. Most of these are in the South Ward. Notices under Section 47 of the Public Health Act have been served on the owners of those pail closets that are within the sewered area informing them that the Corporation propose to convert and to charge them with half the cost of carrying out the works. It is expected that before the end of next year there will be no pail closets in existence in any part of the Borough where a sufficient water supply and sewer is available.

In 1920 the Council considered a scheme for the wholesale conversion of all the pail closets in the area, the estimated cost of which was £50,000. This was not adopted on account of the expense, and a voluntary assisted scheme of conversion was started, the Council providing a sum each year out of revenue for the purpose. Whilst the method has proved long and tedious, it has saved the ratepayers from having to sustain a large financial burden due to loan charges and to the fact that since 1920 building costs have fallen considerably. It must also be borne in mind that the scheme for the wholesale conversion in 1920 would have involved the Corporation in a further huge expenditure on sewerage work expansion and additional water supplies. These services have since been expanded due to the rapid growth of the town. The Council and the property owners are to be congratulated upon having effected this very vital public health improvement without any friction, and without imposing any serious financial burden on the ratepayers.

Public Cleansing.

This important public health service continues to expand in so far as the collection and disposal of house refuse is concerned, but to decrease in so far as the collection and disposal of nightsoil is concerned. New building estates have been opened out on the

western boundaries of the Borough, the density of the houses being limited to 8 to the acre. In order to facilitate the removal of the bins from the house to the collecting lorry and to obviate the necessity for two men having to go to one house for the removal of heavy bins, bin trucks were provided. These effected a considerable saving in time and paid for themselves during the first few weeks. There was a tendency on the part of the men using the trucks to get too far ahead of the lorries, that is to say, they were having about 12 bins standing along the curb waiting to be emptied. This practice was stopped, instructions being given that the truck men were to keep just in front of the refuse waggons. After a period of about six or seven weeks, the refuse collectors took a dislike to the trucks, and complained to their union that the work was much harder. The union organiser came to investigate. A youth aged 17 was put on this work to demonstrate the saving of time and energy, and the ease with which the bins could be moved. Whilst he expressed no opinion, nothing further was heard of the complaint. Before the trucks were put into use it was found there were instances of two men having gone to the rear of a house to bring a dustbin and when examined before emptying into the collecting vehicle, found to be half or even less than half full. The operation of the truck leaves no excuse for two men to be found at one house.

The garages to house the transport of the department, the stores and accommodation for the men, is situated near the north-east end of the Borough on a site which was previously a controlled tip. The buildings, which have been up a good many years, are of a temporary character, being constructed chiefly of timber and corrugated iron. The accommodation is very poor and insufficient. The situation is poor, being in the extreme end of the Borough. The Council have considered the erection of a permanent new depot on land situated in the Frodingham Ward which is almost in the geographical centre of the town and near to the refuse disposal point. It is proposed to provide accommodation for all transport, men's mess room, baths, incinerator for the disposal of light combustible refuse, paper baling shed, stores, office and weighbridge. As the site is on part of a parcel of land of 46 acres purchased for refuse disposal purposes, and which it is estimated will be sufficient for at least 15 years, it is felt justifiable to include a weighbridge in the scheme.

ANALYSIS OF HOUSE REFUSE.

During the week ending 20th August an analysis of about 5 tons of refuse collected from different parts of the Town was carried out, the results being as follows:—

Where from.	Fine Ash.	Cinders.	Iron & Tin.	Vegetable Matter & Waste Food.	Rags.	Bones.	Paper.	Garden Refuse.	Pots & Glass.	TOTAL WEIGHT. Tons, Cwts, Qrs, lbs.
Ashby High Street.										16
Bottesford Lane	47.01	21.84	2.9	1.63	.65	.11	4.52	12.04	9.3	19 —
Old House, Frodingham ...	44.19	26.44	2.26	2.58	.97	.32	5.49	9.69	8.06	19 1
Housing Estate	35.39	22.78	3.69	3.00	.94	.30	8.7	17.4	7.8	1 — 3 9
Grosvenor Street, Crosby ...	47.78	26.06	4.14	2.02	1.00	.30	2.72	7.48	8.5	1 — 2 18
New houses in Old Brumby	42.46	22.19	5.15	3.63	1.21	.3	4.14	13.33	7.59	1 — 2 10
AVERAGES. (%)	43.17	23.96	3.6	2.6	.93	.32	5.2	11.9	8.32	5 — 2 16

It will be seen that the average cinder content is equal to 23.96% of the total weight, that is to say that nearly one quarter of the refuse collected is good burnable fuel which should never be put into the refuse. It represents an increase of more than 10% on the amount found in the refuse at approximately the same period of the year two years ago. One can only conclude that in the prosperous periods that people become less thrifty and more careless. The rag and iron content is less than two years ago; this is probably due to the present higher market value making it profitable for dealers to collect these materials from houses. The amount of garden refuse represents 11.9% of the total weight, and is considerably higher than two years ago in spite of repeated warnings to householders that we are not bound to collect such matter. The difficulties of householders in this connection can be appreciated, but there are some people who never make any attempt to dispose of their own garden refuse and who consider an unlimited amount of this material should be removed at the expense of the rates. They become annoyed when the removal of such stuff is questioned and ask "What do we pay our rates for?" It cannot be too strongly emphasised that garden refuse is not domestic refuse, that the Local Authority is not bound to remove it, and that if unlimited licence is given the cost of the service will rise considerably.

Collection of House and Trade Refuse.

The whole of this work is carried out with mechanical transport. Three S.D. Freighters and four Fords are employed. Two of the Freighters are 14 years old and one of the Fords 7 years old. Owing to their poor condition it will be necessary to provide, during the next financial year, for the purchase of at least two new vehicles.

Except in the case of small isolated districts, the relay system is employed, the work being allocated to three gangs of six men and two vehicles. One carrier out in each gang is placed in charge and receives an additional penny per hour on account of this. The charge-hands are responsible to the general foreman.

The dustbin carriers work 42 hours per week. Except in exceptional circumstances no refuse collection work is carried out on Saturdays. This allows the motor drivers time to clean, grease and generally overhaul their vehicles without having to work overtime. It also acts as a reserve to pull up lost time due to bad weather and holiday periods. It is found too that householders prefer to have their refuse collected before Saturday so that they are clean and tidy for the week-end. About the middle of the year the dustbin carriers commenced an agitation to be allowed to work 47 hours per week. The matter was taken up by the Union, but was not settled at the end of the year. As all other departments of the Corporation work a 47 hour week it seems very likely that their request will be granted. The general trend of Trade Unions is towards a reduction in the working hours per week. It is rather surprising therefore to find a Trade Union pressing for an increase in the working hours of its members. It can only be looked upon as a retrograde step.

During the year the Council made application to the Local Authorities Non-Trading Services (Manual Workers) Provincial Council No. 5 East Midland Area for admission. This was granted, and they were put into Grade A (2). This resulted in an increase of pay for many Council employees, but as the dustbin carriers were already receiving the rate of pay specified in Grade A (2) they did not receive any increase and became dissatisfied. This commenced the agitation to increase their working hours from 42 to 47 hours per week.

The amount of refuse collected during the year including unfit food and trade refuse was 10,356 tons or 156 tons more than last year. This is equal to 14.09 cwts. per 1,000 population per year against 14.43 last year. This shows a reduction in yield of 0.34 cwts. per 1,000 persons per year. The amount collected is based on test weighing. In the past it has been the custom to weigh a complete weeks collection 12 times in the year. Since the point of disposal was removed to Brigg Road this check has been carried out only 4 times in the year.

The request made last year to householders to bind, bundle and hand their waste paper to the dust-men did not have a lasting effect. The circular sent out caused a few tradespeople to agitate for a free removal of their trade refuse, on the grounds that the Council was selling some of the material collected. The representatives of waste paper factories suggested the free collection of waste paper from trading concerns, but as this might have undermined the principle of the payment for the removal of trade refuse and a consequent reduction in the revenue from this source, the suggestion was not acceptable.

Trade refuse is removed regularly only from those persons who enter into an agreement with the Corporation to have it removed weekly and to pay an agreed amount quarterly. The charge is at the rate of $\frac{1}{4}$ d. per bin — or its equivalent — per quarter. Those not requiring a weekly service have it moved on request after agreeing to pay the estimated cost of removal and disposal. Special sacks are provided by the department for the use of persons on the trade refuse list in which to store their waste paper or light combustible refuse. There is no free trade refuse collection. The income from this source during the year ending 31st March, 1938, amounted to £175 14s. 0d., an increase of £18 1s. 6d. over last year's receipts. 75% of this amount is allocated to the cost of the collection service.

Disposal of House and Trade Refuse.

With the exception of clean paper and other light combustible trade refuse the whole of the refuse is disposed of by controlled tipping at the Corporation's disposal site in Brigg Road. Portable wire screens are provided to prevent, as far as possible, light waste matters being carried away by the wind. In spite of this, however, it is found almost impossible during exceptionally windy weather to prevent a certain amount of paper blowing away during the period when the lorries are tipping. As much of this as possible is collected as soon as is practicable.

There is an abundance of soil on the site for covering purposes, but the digging by hand in sufficient quantities for efficient covering is expensive. A mechanical digger was hired on two occasions at the week-end to get sufficient soil to put a 2ft. 0ins. covering on the finished parts of the tip, and the department's own refuse lorries were used for hauling it. It is intended to bring the land back into cultivation. In order that a sufficient amount of soil will be available near the point of tipping the Council are being recommended to provide approximately £500 in the next year's rate estimate to cover the cost of the purchase of a small mechanical digger.

Waste paper is disposed of as far as is practicable by baling and selling to paper mills. Paper collected for baling and found to be unsuitable is burnt along with other light combustible material trade waste in an incinerator at the Winterton Road Depot.

The Health Department continues to dispose of markets refuse and street sweepings without charging the cost to the departments concerned.

Nightsoil Collection and Disposal.

It is pleasing to report that the service is now almost reduced to zero. It now only employs one motor driver and two pail carriers on one night each week. It is expected in the near future to reduce the time taken to empty and dispose to not more than two hours per week. At the end of the year there were 147 pail closets in existence. A number of these are situated at farm cottages and are cleansed by the occupiers. It is expected that early in the coming year that the Corporation will have not more than 40 of these pails to cleanse. These are situated at Santon and are outside the sewered area and unlikely to come within the Corporation's sewerage system.

Cleansing Costs.

A statement of costs checked and certified by the Borough Treasurer is given in Tables 26 and 27 at the end of this report.

PUBLIC CONVENIENCES.

The department is responsible for the control and management of the public conveniences in the town. Whilst the centre of the town is adequately provided with men's conveniences there seems to be a need for accommodation for women in the Cole Street area. The district of Ashby is still without a convenience for either men or women. The Health Committee are mindful of this requirement and have spared no effort to obtain a suitable site in a proper position. During the coming year it is expected to obtain the site at the corner of Bottesford Road and Ashby High Street which is at present occupied by a condemned cottage awaiting demolition and which is being acquired by the Highways Department for road improvement purposes. There are at present five men's and two women's conveniences; W.C. accommodation is provided in all except one. Wash-up accommodation is provided in three, these having full-time attendants.

The following is a statement showing the income from these conveniences for the twelve months ending 31/12/37.

Convenience.	No. of persons using W.C., s.	Receipts.			No. of persons using Wash-up.	Receipts.			No. of persons using Weighing Machines.	Revenue (one-third total receipts).			Total Receipts.		
		£ s. d.				£ s. d.				£ s. d.			£ s. d.		
Market Hill (Ladies) ..	23,659	98	11	7	491	4	2	4	2,109	2	18	7	105	12	6
Market Hill (Men)	11,798	49	3	2	—	—			26,367	36	12	5	85	15	7
Britannia (Ladies) ..	20,665	86	2	1	79	13	2		2,433	3	7	7	90	2	10
Britannia (Men)	11,910	49	12	6	609	5	1	6	29,172	40	10	4	95	4	4
Cole Street (Men)	939	3	18	3	—	—			1,116	1	11	0	5	9	3
Furnace Arms (Men)	936	3	18	0	—	—			—	—			3	18	0
<hr/>															
	69,907	291	5	7	1,182	9	17	0	61,197	84	19	11	£386	2	6
<hr/>															

NOTE. — The weighing machines are the property of an automatic machine company. The Council receives one-third of the receipts and the amount stated represents that taken by the Council only.

SANITARY INSPECTION OF THE AREA.

A classified statement of the number of premises visited, the defects or nuisances discovered, and the action and result of action taken in regard to these will be found in Tables 17, 19 and 21 at the end of the Report.

The total number of nuisances abated and improvements effected during the year is 3,487 against 2,960 in 1936, while 9,964 general inspections were made against 9,872 in 1936.

Smoke Abatement.

During the year seven informal and six formal notices were served for the abatement of nuisances arising from smoke. Most of these were in connection with small businesses such as fried fish shops, laundries, etc.

Shops Act, 1934.

The Corporation's Shops Inspector is engaged under the Town Clerk's supervision in carrying out work under this Act and has made inspections to discover shops insufficiently provided with means of ventilation, washing facilities, sanitary conveniences and means of heating. Notices have in many cases been served upon the shopkeepers in default, in consequence of which steps have been taken to have the deficiencies remedied.

Factories, Workshops and Workplaces.

There are 25 Factories and 64 Workshops in the District. A total of 197 inspections were made to these premises. A detailed statement showing the findings is contained in Table 18 at the end of this report.

Bakehouses.

There are 18 Bakehouses within the District, none of which is underground. 37 inspections were made; no contraventions of Regulations were found.

Offensive Trades.

At the end of the year there were 52 premises in which offensive trades were being carried on. 49 of these are fish frying premises, the remainder are gut scraping and tripe boiling businesses. 109 inspections were made.

Fish Frying.

The number of fish frying premises has been reduced by three. No applications to commence new businesses have been made during the year. One business was transferred to newly constructed premises. In 1932 the Ministry of Health confirmed an order of the Scunthorpe and Frodingham Urban District Council declaring the trade of a fish frier to be an offensive trade.

The Order came into force on the 1st of May 1932. In November 1937, the Corporation made application to the Ministry of Health under Section 107 of the Public Health Act 1936 which came into force on the 1st October 1937 for the making of a new order declaring the business of fish frying to be an offensive trade. The Ministry did not grant the request but asked for further evidence that the making of such an order was necessary. No decision had been made at the end of the year. The Corporation have a Town Planning Order, which allows them to regulate the commencement of fish frying establishments inside the Town Planning Area, but as the built up or central part of the town is excluded from the Town Planning Order, it would appear that at the end of three years from the 1st October 1937 it will be possible for a person to open a row of fish frying shops and the Corporation will be powerless to prevent it. The regulation of the trade by bye-laws is insufficient. There is a characteristic smell attached to the best regulated fish frying shop, and, if many of these establishments are concentrated in one area, the smell is intensified and will give rise to serious complaints. Previous to 1932 the Corporation experienced considerable trouble by persons starting fish frying business within close proximity to a similar business irrespective of complaints made by residents. The practice was to start the business, boost it up by giving larger portions of fish than his neighbour, then advertise the business for sale. It was usually sold to someone outside the town who afterwards discovers that it was impossible to give quality and quantity and make it pay. The seller then proceeds on the same lines in another part of the town. The indiscriminate opening of fish frying shops is not in the interests of the fishing industry. It is hoped that the Corporation will press for the making of the "Order."

The following table shows approximately the summer-time consumption of fish and chips in the Borough, set out in Ward order.

Summer (Weekly) Consumption of Fish and Chips.

Ward	Potatoes		Fish
	tons	cwts.	stones.
Ashby	5	12	164
Bramby	1	7	40
Frodingham	3	11	111
East	6	1	223
Town	6	6	229
Crosby	4	5	161
West	0	18	20
Park	2	2	75
Totals	35	2	1,023

The average amount of food cooked per establishment (weekly) is equal to 21.23 stones of fish and 14.6 cwts. of potatoes. On the basis of a population of 10,000 the consumption of these foods per 100 of the population is equal to 2.5 stones of fish and 1.75 cwts. of potatoes per week.

Tents, Vans and Sheds.

At the end of the year there were within the Borough 52 moveable dwellings as against 74 last year. It is expected that next year there will be no moveable dwellings in the district occupied by anyone except those whose business compels them to be itinerant. The Corporation notified the occupiers of all moveable dwellings that it was illegal to continue to occupy them for longer periods than stated in the Public Health Act 1936 without being licensed to do so by the Local Authority. Applications for licences were made. The Corporation decided, in order to give the occupiers time to find proper housing accommodation and so that no undue hardship would result, to grant licences for a period not exceeding six months conditional that at the end of that period they would cease to inhabit and would demolish or remove the moveable dwelling.

The following breaches of the bye-laws occurred :—

- (a) not providing a sufficient and wholesome water supply to three caravans ;
- (b) not providing proper sanitary accommodation for the occupiers of three caravans.

The person concerned was asked to appear before the committee to give his explanation. He promised to have the caravans moved forthwith. As this agreement was carried out no further action was taken.

Common Lodging Houses.

There is one Men's Common Lodging House in the district with accommodation for 120. The building is kept clean and is well adapted for the purpose. The keeper and deputy keeper are registered in accordance with the provisions of Section 236 of the Public Health Act 1936. Owing to the flourishing conditions of the local steel industry and to the execution of a large works extension by a firm of public works contractors, this place has not been capable of accommodating all the persons admitted or applying for admission.

It was found that various persons had rented vacant business premises in the east end of the town and were taking in casual lodgers. When inspection of these premises was attempted admission was refused. Warrants to enter were applied for and granted in respect of four premises. When entry was made it

was found that the places were badly overcrowded, that the occupants were of the poorer classes, were strangers to each other and inhabited common rooms. Some of them were sleeping two in a bed and four beds in one room. The places were in a filthy condition, the bedding poor, insufficient and in one case lousy. The circumstances were reported to the Corporation, who decided to institute court proceedings against two persons in respect of the four premises for contravention of Section 236 of the Public Health Act 1936. This action had not been commenced in the year under review.

Hut Encampment.

In the early part of the year application was made by a firm of public works contractors who had secured a contract for large works extensions at a local steelworks to erect a wooden hut encampment. This was granted subject to the Corporation's officers having right of entry for inspection purposes, to the provision of a "sick bay" and to other sanitary requirements respecting floor space per bed, W.C. accommodation, water supply, sewage and refuse disposal. The accommodation was for approximately 200 men and was to be for two years. The contractors undertook to demolish and remove the huts from the town immediately their contract was completed. There was some small trouble in the early days with regard to complying with the Corporation's requirements and the management of the premises, but this was eventually overcome. While the existence of such an encampment in the town is not regarded as satisfactory, it may be tolerated temporarily in view of the shortage of accommodation for migrant workmen.

Slum Clearance.

During the year the Corporation considered the making of demolition orders on 10 houses situated at Ashby Ville. The owners offered no resistance and demolition orders were made. Three of the houses were vacant. The remainder are awaiting the provision of rehousing accommodation.

The Corporation completed its rehousing programme of 70 houses by the erection of 34 houses in Holland Avenue made up as follows:— 2 bedroom houses—8, 3 bedroom houses—16, 4 bedroom houses—8, 5 bedroom houses—2. In fixing the rents of the houses consideration was given to the means of the tenants. The lowest rents were fixed at 1 6d. per week and the highest at 8/6d. The Health Committee considered the rents being paid and the means of the tenants of the remaining 1930 Act houses. Variations were made according to the circumstances. With the coming into force of the Housing Act 1936 the Health Committee handed over to the Housing Committee the complete control of all slum clearance houses.

Since the Corporation commenced their slum clearance programme in 1930, 188 dwellings have been dealt with formally as individual houses not being capable of repair at reasonable expense. Of these, 131 have been demolished, 3 have been closed, 23 have been rendered fit in accordance with written undertakings accepted by the Corporation, and 31 are awaiting completion of action.

Overcrowding.

The following is a statement showing the position of overcrowding at the end of the year:—

(a) (1) Number of dwellings overcrowded at end of year	74
(2) Number of families dwelling therein	80
(3) Number of persons dwelling therein	603
(b) Number of new cases of overcrowding reported during the year	19
(c) (1) Number of cases of overcrowding rehoused by the Corporation during the year	12
(2) Number of persons concerned in such cases	83
(3) Number of cases of overcrowding relieved by Slum Clearance rehousing	1
(4) Number of persons concerned in such cases	11
(5) Number of cases of overcrowding abated in Corporation houses	8
(6) Number of persons concerned in such cases	68
(d) Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	1

There were 29 cases of overcrowding abated as the result of members of families leaving home and the removal of lodgers.

The measurement of all working-class dwellings within the Borough was completed at the end of March. The whole of the overcrowding cases found in the preliminary survey in the early part of 1936, and the new cases found as the result of the second survey, show that at the times when the investigation was completed there were 92 cases of overcrowding (excluding moveable dwellings and houses being dealt with under the Slum Clearance programme). Of these 92 cases, 45 require houses larger than the largest existing Corporation house, 9 could be accommodated in existing 4 bedroom Corporation houses, 4 would require large 3 bedroom houses, 3 could be accommodated in ordinary 3 bedroom Corporation houses, and 9 would require 2 bedroom houses. Of the remaining 22 cases many are owner occupiers who have signified their intention to refuse a Corporation house if one is provided. Some of these people have businesses or work connections in the locality; other members of the family leaving

home, and others promised the removal of lodgers. It is anticipated that if the Corporation provide houses to accommodate families requiring the larger 4 bedroom and 5 bedroom type that a great deal of the remaining overcrowding can be remedied by exchanges.

It will be appreciated that the circumstances of overcrowding are continually changing owing to births, marriages and deaths, the removal of families or parts of families and other causes, and on this account the Corporation considered very carefully the policy of building great numbers of the very large type houses. It was eventually decided to erect 30 houses made up as follows: 10 5-bedroom, 10 large 4-bedroom, 10 (5 medium 4-bedroom, 5 large 3-bedroom for families of 6) of the interlocking type. Plans and specifications have been prepared and tenders for the erection of these have been invited. It is expected that the construction will be commenced early next year. In addition to this scheme, the Corporation have in course of construction 50 smaller houses and have obtained the sanction of the Ministry of Health to the erection of a further 66. They have also during the year acquired two additional sites totalling 20 acres for housing purposes.

Eradication of Bed Bugs.

During the year reports were received of infestations by bed bugs concerning twenty-one houses. In all cases the Corporation arranged for the houses to be sprayed with insecticide and afterwards fumigated with some of the proprietary brands of fumigators specially made for the purpose. In two cases it was found necessary to carry out the spraying and fumigating twice. In addition to treating the affected houses the tenants are given type-written advice concerning bugs and how to eradicate them. The owners are also interviewed and given advice. In the case of the worst infestations the owners are asked to remove all skirting boards, back moulding, etc., and to remove all wall-papers, to cut out all cracks and crevices in the plaster and to take up floor boards, after a room has been sprayed but before fumigation is carried out.

There were no cases of bugs reported in Corporation houses. If the Corporation Estate Agent has any reason to suspect that a prospective tenant of a Corporation house is likely to import bugs into a Corporation house, he issues to them a type-written circular advising them to seek the assistance of the Health Department and warning them that the key of the new house will only be handed to them after the Health Department is satisfied, by inspection on the morning of removal, that all furniture and other goods are clean and free from infestation,

INSPECTION AND SUPERVISION OF FOOD.

MILK SUPPLY.

(a) Dairies, Cowsheds and Milkshops.

There are within the Borough 20 premises registered for the sale of milk by retail, and eleven persons registered as wholesale producers of milk. Only one person within the district is licensed to produce accredited milk. During the year one wholesale producer retired from the business and his successor did not continue milk production. 46 inspections were made regarding the milk shops and 21 regarding the producers' premises.

(b) Veterinary Inspections.

Four veterinary inspections of the milch cows were carried out during the year. The total number of cows examined was 467, or an average of 117 per inspection and equal to 10 cows per producer, as against 9.8 cows per producer last year. The Veterinary Inspector found no cases of tuberculosis or other affections of the udder.

(c) Bacteriological and Biological Examination of Milk.

The undermentioned samples of milk were collected and sent to the University of Sheffield for bacteriological examination, methylene blue test and for guinea pig inoculation tests for tuberculosis. All samples were packed in ice and delivered to the bacteriologist the same day as collected from the milk dealers. The samples of graded milks were selected at random from retailers and delivered to the bacteriologist in the sealed bottles as supplied to the public.

Tuberculin Tested	4 samples
Accredited	8 „
Pasteurised	4 „
Raw Milk	12 „
Cream	1 sample
Pasteurised Cream	2 samples
<hr/>	
Total	31 samples
<hr/>	

The results of the examinations are given in Table 22.

Of the 31 samples sent none were found to show evidence of Tuberculosis.

(d) Milk (Special Designations) Order 1923-1936.

The following licences were granted during the year:—

To bottle and sell Tuberculin Tested	1
To sell Accredited	1
To Pasteurise milk	1
Supplementary Licence to retail Pasteurised Milk	1

Consumption of Milk.

Enquiries made in November revealed that the approximate daily consumption of milk within the Borough was equal to 2,229 gallons. On the basis of a population of 40,000 this is equal to a consumption of 0.44 pints or slightly less than half a pint per head of population per day. The average per capita consumption of liquid milk in Great Britain is two-fifths of a pint.

Of the total quantity sold 47 per cent. is pasteurised, 14 per cent. is sterilized, 6.5 per cent. accredited (bottled), 1.5 per cent. Tuberculin Tested and 30.5 per cent. is ordinary raw milk.

Only 10.5 per cent. or slightly more than one-tenth of the total milk consumed in the Borough is produced within the Borough.

INSPECTION OF MEAT AND OTHER FOODS.

(a) Slaughterhouses.

The supervision of slaughterhouses and meat inspection absorbs a considerable amount of the time of the Sanitary Department, and an appreciable percentage of the work is done outside ordinary office hours. Owing to the congestion at the public abattoir during the first three days of the week, it is necessary for slaughtering to continue up to nine o'clock at night. As the edible offals are required for early morning sale, it is necessary to have an inspector in attendance until after the slaughtering is completed. Owing to the crowding of carcasses and offals, and the use of artificial light, efficient inspection is difficult. The erection of a new public abattoir is long delayed. Its necessity cannot be denied.

During the early part of the year a public enquiry was held by the Ministry of Health into the Council's application to borrow moneys for the purchase of a site for the erection of a new public abattoir. The purchase was sanctioned, and completed. Plans were prepared and submitted to the Ministry of Health for approval. They referred the plans to the Livestock Commissioners for their observations. This was as far as the matter had progressed at the end of the year. The Council have been considering the proposal for the provision of a new public abattoir for years, and have spent an enormous amount of time in seeking a suitable site. Having secured a suitable site and prepared the necessary plans, progress seems to be held up by the Ministry of Health, without giving any reason. The matter is urgent as a public health measure, and may present further difficulties if any applications are made to extend, or improve existing private slaughterhouses, or plans are submitted for the erection of new ones.

In addition to the public abattoir there are eleven private slaughterhouses. During the year one private slaughterhouse in the Ashby ward has been demolished, the tenant having transferred his business to other premises. With two exceptions the general standard of all the slaughterhouses, including the municipal one, is bad. Of the two exceptions one can only be described as fair and the other as moderate.

The proportion of animals slaughtered in the public abattoir is equal to 34.5 per cent. of the total slaughtered within the Borough, the remaining 65 per cent. being dealt with in the private slaughterhouses.

The standard of quality of the meat dressed is above the average for an industrial centre. Of 2,526 beasts killed only 278 or 12.5 per cent. were cows. The percentage of the total

animals killed that were examined is as follows. Beasts 100 per cent., Sheep 98.8 per cent., Pigs 99 per cent., Calves 100 per cent. The percentage of all animals examined is 99.1 per cent. The amount of meat surrendered during the year as unfit for food, after examination was 12 tons 10 cwts. 2 qrs. 10 lbs. Details of animals slaughtered, inspection, and diseased meat found will be found in Tables 23, 24 and 25.

(b) Butchers' Shops, Market Stalls and Food preparing premises.

Butchers' shops and food preparing premises are visited from time to time with a view to the detection of unfit food and in regard to general cleanliness and suitability. It is pleasing to record that almost every butcher's shop in the area has now its own refrigerator fitted.

The market stalls are inspected regularly on Friday and Saturday each week, both during the day and evening. Some of the stallholders have installed electric refrigerators.

(c) Public Health Act, 1875 (Section 116).

A report of the seizure of diseased beef from a butcher's stall in the market and from the rear of a shop in the town was made in last year's report. Police Court proceedings were concluded in the early part of the year under review. After receiving a stern warning from the Bench of the seriousness of the offences, the defendant was fined £2 on each of three charges. As the probable purchase price of the unsound beef was not more than the fine imposed in one charge, and as a complete carcase was not seized, it is very probable that the defendant made a good profit on the transaction.

(d) Slaughter of Animals Act, 1933.

There are 87 licensed slaughtermen in the district, an increase of one over last year.

Food and Drugs Acts.

The provision of these Acts are administered in the Borough by the County Council through the Police. It is a very undesirable relic of Rural Administration that the sampling and submission for analysis with subsequent interpretation of such analysis of foods, drugs and food products should be left in the hands of the Police Force. This work is a matter of Medicine and Hygiene and should be one of the duties of the local Public Health Department.

During 1937 the Police took 95 samples in the Borough. 92 of these as listed below were found upon analysis to be "genuine."

Table 17.

WORKSHOPS IN BOROUGH, 1937.

Boot Repairing	...	...	...	...	...	...	...	...	16
Plumbers	...	...	...	...	...	...	...	...	3
Dressmakers and Milliners	...	...	...	...	...	...	...	...	3
Tailors	...	...	...	...	...	...	...	...	6
Joiners	...	...	...	...	...	...	...	...	6
Saddlers	...	...	...	...	...	...	...	...	1
Monumental Masons	...	...	...	...	...	...	...	...	3
Upholstering	...	...	...	...	...	...	...	...	3
Cycle Repairing	...	...	...	...	...	...	...	...	5
Tinsmith	...	...	...	...	...	...	...	...	3
Watch Repairers	...	...	...	...	...	...	...	...	1
Blacksmiths, Wheelwrights	...	...	...	...	...	...	...	...	3
Garages	...	...	...	...	...	...	...	...	9
Galvanising Plant	...	...	...	...	...	...	...	...	1
Sugar Boiler	...	...	...	...	...	...	...	...	1
									<hr/> 64

COMMON LODGING HOUSE.

Inspections made	...	...	...	...	...	...	...	...	56
Notices	...	...	...	...	...	...	...	...	<hr/>2
Cleansed and Limewashed	...	...	...	...	...	...	...	...	1
Other Defects remedied	...	...	...	...	...	...	...	...	1

GENERAL INSPECTIONS.

No. of Inspections	...	...	...	...	...	...	...	...	9,964
No. of Nuisances abated	...	...	...	...	...	...	...	...	3,487
	P.	C.	E.	T.	W.	B.	F.	A.	
No. of Informal Notices	4	36	69	98	44	12	69	124	456
No. of Statutory Notices	2	8	23	29	6	—	15	25	108
No. of Warning Letters	—	2	3	3	1	—	—	3	12
No. of Complaints received	13	6	30	21	16	4	9	7	106
Total Number of Nuisances during year:—									
(1) Abated as result of informal action	...	...	...	...	...	...	...	...	3,224
(2) Reported to Council									
Statutory Notices issued	...	...	...	...	...	...	...	...	108
Statutory Notices not issued	...	...	...	...	...	...	...	...	232

DETAILS OF NUISANCES ABATED.

	After Informal Intimation.	After Statutory Notice.
Smoke	7	6
Accumulation of Refuse	19	1
Foul Pigs and other animals	6	—
Dampness	72	39
Yards repaired or repaved	82	31
Other Nuisances	2,988	186

Table 18.

FACTORIES, WORKSHOPS AND WORKPLACES.

Premises.				Number of Inspections.	Written Notices.	Occupiers Prosecuted.
Factories (including Laundries)	...	...	Factory	69	—	—
Workshops	...	...	...	128	1	—
Workplaces	...	...	...	—	—	—
Total				197	1	—

DEFECTS FOUND IN FACTORIES, WORKSHOPS AND
WORKPLACES.

Particulars.				Number of Defects.		Referred to H.M. Inspector.	Prosecu- tions instituted.
				Found.	Remedied.		
Want of Cleanliness	...	2	1	—	—	—	—
Want of Ventilation	...	—	—	—	—	—	—
Other Nuisances	...	—	—	—	—	—	—
Sanitary Accommodation:							
Insufficient	...	1	—	—	—	—	—
Unsuitable or defective	—	—	—	—	—	—	—
Not separate for sexes	...	—	—	—	—	—	—
Illegal occupation of under- ground bakehouse	...	—	—	—	—	—	—
Total				3	1	—	—

Table 19.

IMPROVEMENTS.

	Park.	Crosby.	East.	Town.	West.	Brumby, Frodingham.	Ashby.	Totals.
Leaves Gutters, etc., repaired ...	6	13	29	20	29	2	16	37
Roofs repaired ...	1	15	40	26	20	2	6	22
Yard paving repaired ...	1	17	31	17	22	3	10	23
House floors repaired ...	—	3	34	13	11	3	8	9
Dampness excluded ...	6	20	27	16	16	2	10	14
Yards cleansed ...	—	1	1	—	1	—	—	—
Houses cleansed ...	—	—	1	—	2	—	1	—
Nuisance from animals ...	—	2	2	—	1	1	—	—
Accumulation of Manure ...	—	—	—	2	3	—	—	—
Offensive Accumulation ...	—	2	2	5	3	—	1	2
New Sinks fixed ...	—	—	14	3	2	—	—	—
Sink Waste Pipes repaired ...	1	4	6	5	2	—	2	—
Pumps repaired ...	—	—	2	—	—	—	—	—
Houses supplied with Town's Water (includes new houses) ...	149	4	1	—	139	148	92	166
General Defects remedied ...	17	56	297	113	132	36	84	119
Overcrowding abated ...	6	3	12	1	3	2	15	8
W.C. Flushing Tanks repaired ...	2	6	7	6	10	1	3	4
New W.C. Basins Fixed ...	—	—	2	1	3	—	—	1
New W.C. Structures built ...	—	—	7	—	3	—	—	—
Pail Closets converted to W.C.'s ...	—	1	4	3	—	—	2	16
Smoke nuisances dealt with ...	—	—	7	3	2	—	1	—
New dustbins provided ...	21	106	87	66	93	14	62	99
New privy pails ...	—	—	6	—	—	—	—	—
Inspection Chambers provided ...	—	—	2	3	1	1	1	10
Drains repaired or amended ...	—	8	12	7	13	3	8	2
Drains cleansed ...	8	60	122	95	83	24	42	12
Drains reconstructed ...	—	—	—	—	—	—	—	4
New Drains inspected ...	—	3	4	4	6	1	2	16
New Sculleries ...	—	—	5	—	—	—	—	—
W.W.C.'s converted to W.C.'s ...	—	—	—	—	—	—	—	—
								1

Table 20.

DISINFECTION.

Rooms disinfected	65
(a) Ordinary infectious diseases	60
(b) Tuberculosis	5
Beds disinfected or destroyed	56
(a) Ordinary infectious diseases	46
(b) Tuberculosis	10
Beds disinfected or destroyed for other reasons	25
Rooms disinfected for other reasons	12
Blankets and Sheets, etc., disinfected	334
Pillows and Bolsters disinfected	195
Articles of clothing disinfected	18
Total—disinfected or destroyed	547

DRAINAGE AND SEWERAGE.

Closets.

Number of houses with privy vaults in district	nil
Number of houses with pail closets in district	147
Number of pail closets repaired	6
Number of houses with water closets	10,558
Number of water closets substituted for pail closets	26
Number of water closets repaired	61

Drains.

Drains examined, tested and exposed	36
Drains unstopped, repaired, trapped, etc.	446
Waste pipes, rain water pipes, disconnected, repaired, etc.	152
Drains reconstructed	4

Sewers.

New lengths of sewers laid	4,866 yds.
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DETAILS OF INSPECTION OF COWSHEDS AND MILKSHOPS.

Cowsheds.

Number of cowsheds on register	11
Number of inspections	21
Contraventions of regulations	7
Contraventions remedied	4
Number of milch cows in district	116

Dairies and Milkshops.

Number of milk shops on register	20
Number of inspections	46
Contravention of regulations	1
Contraventions remedied	1

Table 21.

HOUSING.

Number of New Houses erected during the year :—

(a) Total	...	...	...	...	...	...	...	...	...	...	758
(b) With State assistance under the Housing Acts :											
1. By Local Authority	...	...	...	...	...	...	...	...	...	...	34
2. By other bodies or persons	...	...	...	...	...	...	...	...	...	...	690

1. Inspection of dwelling-houses during the year :—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts	...	...	...	...	...	...	...	...	...	1,685
(b) Number of inspections made for the purpose										3,829
(2) (a) Number of dwelling-houses (included under sub-head (1) above which were inspected and recorded under the Housing consolidated Regulations, 1925)	...	...	...	...	...	...	...	...	...	82
(b) Number of inspections made for the purpose										236
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for habitation	...	...	...	...	...	...	...	...	...	10
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	...	...	...	...	...	...	...	...	...	72

2. Remedy of Defects during the Year without service of Formal Notices :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	721
---	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Table 21—continued.

3. Action under Statutory Powers :—

A—Proceedings under sections 17, 18 and 23 of the Housing Act, 1930 :

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	0
(2) Number of dwelling-houses which were rendered fit after service of formal notices :	
1. By owners	0
2. By Local Authority in default of owners ...	0

B—Proceedings under Public Health Acts :

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	128
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :	
1. By owners	102
2. By Local Authority in default of owners...	26

C—Proceedings under section 19 and 21 of the Housing Act, 1930 :

(1) Number of dwelling-houses in respect of which Demolition Orders were made	31
(2) Number of dwellinghouses demolished in pursuance of Demolition Orders	31

D—Proceedings under section 20 of the Housing Act, 1930 :

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	1
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	0

Table 22.

BACTERIOLOGICAL ANALYSIS OF MILK SAMPLES, 1937.

Bacteriologist's Report.						
Date.	Nature of Sample.	Decolourisation of Methylene Blue.	Presence of B. Coli.	Bacterial Count.	Phosphatase Test.	Presence of Tubercle Bacilli (biological test). Remarks.
19.2.37.	Pasteurised	—	1/100th m.l.	57,000	—	Absent Not satisfactory.
	Accredited	—	Absent	7,000	—	Absent Satisfactory.
	Accredited	—	1/10th m.l.	124,000	—	Absent Satisfactory.
	Tuberculin Tested	—	1/10th m.l.	38,000	—	Absent Satisfactory.
	Raw	—	1/100th m.l.	1,740,000	—	Absent Not satisfactory.
	Raw	—	1/100th m.l.	256,000	—	Absent Not satisfactory.
18.6.37.	Pasteurised	—	1/100th m.l.	1,584,000	—	Absent Not satisfactory.
	Accredited	—	1/100th m.l.	Not done	—	Absent A dirty milk.
	Accredited	—	Absent	Not done	—	Absent A clean milk.
	Tuberculin Tested	—	1/100th m.l.	Not done	—	Absent A dirty milk.
	Raw	2 hrs.	1/100th m.l.	Not done	—	Absent A very dirty milk.
	Raw	2½ hrs.	1/100th m.l.	Not done	—	Absent A very dirty milk.
29.7.37	Pasteurised	—	1/100th m.l.	Not done	—	Absent Not a clean milk.
	Accredited	—	Absent	Not done	—	Absent A very dirty milk.
	Accredited	5½ hrs.	1/10th m.l.	500	Negative	Absent Satisfactory.
	Accredited	5½ hrs.	1/100th m.l.	1,400	—	Absent Satisfactory.
	Tuberculin Tested	5½ hrs.	1/100th m.l.	Not done	—	Absent Adverse B. Coli.
	Cream	—	1/100th m.l.	Not done	—	Absent Adverse B. Coli.
24.11.37.	Cream	—	1/100th m.l.	254,000	—	Absent Adverse.
	Raw	3½ hrs.	—	9,000,000	—	Absent Very dirty.
	Pasteurised	—	1/100th m.l.	Not done	—	Absent Methylene Blue test adverse.
	Accredited	—	Absent	8,200	Negative	Absent Satisfactory.
	Accredited	5½ hrs.	1/100th m.l.	Not done	—	Absent Adverse B. Coli.
	Tuberculin Tested	5½ hrs.	1/10th m.l.	Not done	—	Absent Satisfactory.
.	Raw	5½ hrs.	Absent	Not done	—	Absent Satisfactory.
	Raw	5½ hrs.	Absent	Not done	—	Absent Satisfactory.
	Raw	5 hrs.	1/100th m.l.	Not done	—	Absent Satisfactory.
	Raw	5½ hrs.	1/100th m.l.	Not done	—	Absent Adverse B. Coli.
	Raw	5½ hrs.	1/100th m.l.	Not done	—	Absent Adverse B. Coli.
	Raw	5½ hrs.	1/100th m.l.	Not done	—	Absent Adverse B. Coli.

Table 23.

PARTICULARS OF ANIMALS SLAUGHTERED AND INSPECTED IN WARD ORDER.



	Park.	Crosby.	East Private.	Public.	Town.	West.	Brumby.	Froding- ham.	Ashby.	Private Houses.	Total.
Cattle											
Slaughtered	—	214	883	1296	24	—	—	—	106	—	2523
Examined	—	214	883	1296	24	—	—	—	106	—	2523
Sheep											
Slaughtered	—	863	2263	2575	87	30	—	—	224	—	6042
Examined	—	842	2226	2571	87	28	—	—	222	—	5976
Pigs											
Slaughtered	—	995	4917	2006	30	245	—	—	417	5	8615
Examined	—	993	4840	2006	30	245	—	—	417	4	8535
Calves											
Slaughtered	—	7	35	102	1	—	—	—	3	—	148
Examined	—	7	35	102	1	—	—	—	3	—	148
Total Slaughtered	—	2079	8098	5979	142	275	—	—	750	5	17328
Total Examined	—	2056	7984	5975	142	273	—	—	748	4	17182
No. of Slaughterhouses	—	2	3	1	1	1	—	—	5	—	13
No. of Inspections	—	333	2131			73	197	—	338	4	3076
Cleansed & Limewashed	—	8	12	4	4	4	—	—	20	—	52

Table 24.**CARCASES INSPECTED AND CONDEMNED.**

	Cattle excluding Cows. Cows. Calves.			Sheep and Lambs. Pigs.	
Number killed	2248	278	148	6042	8615
Number inspected	2248	278	148	5976	8535
All diseases except Tuberculosis. Whole Carcases condemned	—	2	—	1	59
Carcases of which some part or organ was condemned ...	147	21	1	10	62
Percentage of the number inspected affected with diseases other than T.B. ...	6.5	7.5	0.68	0.16	0.72
Tuberculosis only. Whole carcasses condemned	2	6	—	—	19
Carcases of which some part or organ was condemned ...	102	83	—	—	554
Percentage of the number inspected affected with T.B. ...	4.6	32.0	—	—	6.7

Table 25.

UNFIT MEAT SURRENDERED.

The following table gives the Amount of Meat surrendered after examination. It is set out in Month order and gives the weight in lbs. and disease or cause of its unfitness.

Month.	Tuberculosis.	Cirrhosis.	Actinomyces.	Abscess.	Emaciation.	Inflammation.	Pleurisy.	Flukes.	Melanosis.	Fatty Degeneration.	Cysts.	Pericarditis.	Nephritis.	Bruised.	Putrefaction.	Peritonitis.	Tons.	Cysts.	Qrs.	Lbs.
Jan.	3109	9	112	19	56	3	—	—	—	—	—	—	—	—	—	—	1	9	2	4
Feb.	2092	42	168	133	280	111	14	4	—	—	—	—	—	—	—	—	1	5	1	16
Mar.	1285	87	196	196	—	3	—	—	14	18	5	2	3	—	—	—	—	16	—	17
Apr.	1236	31	84	31	—	9	5	42	—	14	5	3	—	—	—	—	—	13	—	4
May	1229	49	56	14	—	—	19	14	—	—	3	—	—	—	—	—	—	12	1	12
June	506	21	84	28	84	3	17	—	—	—	14	—	—	—	—	—	—	6	3	1
July	1324	84	112	63	30	32	—	—	14	—	9	—	—	84	12	—	—	15	3	0
Aug.	2540	16	228	119	420	4	3	28	—	—	3	—	—	95	—	280	1	11	2	8
Sept.	1622	56	224	80	—	—	10	14	—	—	3	—	—	6	104	—	—	18	3	19
Oct.	2004	155	112	56	—	14	31	49	—	14	—	3	—	19	—	—	1	1	3	21
Nov.	913	50	28	20	56	29	—	35	14	—	—	1	5	—	—	—	—	10	1	3
Dec.	1444	14	28	14	—	10	—	—	—	—	4	—	—	12	—	—	—	13	2	14
Totals	19304	614	1232	773	926	218	99	186	42	46	46	9	8	216	116	280	10	15	1	7

OTHER FOOD SURRENDERED.										cwt.			qrs.		lbs.	
Boiled Beef and Tongue	Putrefaction	...	1	2	25	
Pears	"	...	1	0	12	
Tomatoes	"	0	
Plums	"	10	
Cherries	"	12	
Mushrooms	"	18	
Peaches	"	15	
Melons	"	16	
Chilled Rabbits	"	3	6	
Grapes	"	1	12	
Total	4	2	14	

Table 26.

Cleansing Costs for year ending March 31st, 1938.

HOUSE AND TRADE REFUSE.					£	s.	d.	£	s.	d.
Transport.										
Depreciation	on	No. 2 Ford	(7							
		years old)	...		—	—	—			
	„	No. 3 Ford	(4							
		years life)	...		60	0	0			
	„	No. 4 Ford	(4							
		years life)	...		60	0	0			
*	„	No. 5 Ford	(4							
		years life)	...		53	9	3			
	„	No. 1 Freighter								
		(14 years old)			—	—	—			
	„	No. 2 Freighter								
		(14 years old)			—	—	—			
	„	No. 3 Freighter								
		(4 years life)			65	0	0			
Licences and Insurances (Fords and Freighters)					284	0	0			
Repairs and Maintenance (including tyres) (Fords and Freighters)					298	16	0			
*Petrol and Oil					565	2	8			
Wages of drivers					992	11	9			
Wages.										
Refuse Collectors					2307	19	2			
†Supervision					174	16	0			
†Holiday Pay					99	8	9			
†Establishment.										
Insurance (Workmen's Compensation and Public Liability), National Insurance, Depot charges (Equipment, Renewals and Repairs, etc.)					237	7	4			
Total					5198	10	11	5198	10	11
Less Receipts.										
*Haulage on conversion of pail closets					4	11	9			
Miscellaneous					28	4	2			
Trade Refuse Collection					140	11	2			
					173	7	1	173	7	1
Nett Cost					£5025	3	10			
Total amount of Refuse collected during year								10,356	tons	
Cost per ton (including depreciation but excluding capital expenditure)								9s.	8.46d.	

Table 26—continued.

HOUSE AND TRADE REFUSE DISPOSAL.

	£	s.	d.	£	s.	d.
Wages	669	2	0			
Wages, Maintenance of Tips and Baling Paper	74	13	5			
Team Labour	3	17	6			
*Petrol and Oil	83	7	7			
†Supervision and Holiday Pay ...	56	18	11			
†Purchase and leading of soil	61	6	2			

† Establishment.

Insurance (Workmen's Compensation and Public Liability), National Insurance, Depot Charges (Equipment, Renewals and Repairs, etc.)	49	6	4			
	998	11	11	998	11	11

Less Receipts.

Miscellaneous	7	1	0			
Disposal of Trade Refuse	35	2	10			
Rent of land	15	0	3			
	57	4	1	57	4	1
Nett Cost ...	£941	7	10			

Total Quantity of refuse disposed of—10,862 tons.
Cost per ton for disposal—1s. 8.8d.

NIGHTSOIL DISPOSAL.

	£	s.	d.	£	s.	d.
Wages	6	3	5			
†Supervision and Holiday Pay ...	8	8				
Seavenging, Dawes Lane	5	1	0			
Water	3	13	0			

† Establishment.

Insurance (Workmen's Compensation and Public Liability), National Insurance, Depot Charges (Equipment, Renewals and Repairs, etc.)	7	10				
	£15	13	11	£15	13	11

Total Quantity of Nightsoil dealt with—127 tons.
Cost per ton for disposal—2s. 5.66d.

* These figures represent the following proportion of the whole cost and are based on actual mileage in each service.

Refuse Collection 89.1%. Nightsoil Collection 10.9%.
The petrol and oil consumption is that which is actually used on each service, the proportions being as follows:—

Refuse Collection 85.4%. Nightsoil Collection 2.0%.
Refuse Disposal 12.6%.

† Establishment charges are based on the wages in each service, the proportions being as follows:—

Refuse Collection 80.52%. Nightsoil Collection 2.617%.
Refuse Disposal 16.73%. Nightsoil Disposal .133%.

Table 26—continued.

NIGHTSOIL COLLECTION.

Transport.	£	s.	d.	£	s.	d.
*Depreciation on No. 5 Ford (4 years life)	6	10	9			
Licence and Insurance of Ford and Freighter	6	7	5			
Repairs and Maintenance of Ford and Freighter (including tyres)	6	14	3			
*Petrol and oil	13	4	8			
Wages of drivers	37	0	8			
Wages.						
Collectors	68	19	7			
†Supervision	5	16	1			
†Holiday Pay	3	4	8			
†Establishment.						
Insurance (Workmen's Compensation and Public Liability), National Insurance, Depot Charges (Equipment, Renewals and Repairs, etc.)	7	14	2			
	155	12	3	155	12	3
Less Receipts.						
*Haulage on conversion of pail closets	11	3		11	3	
Nett Cost ...	£155	1	0			

Total amount of Nightsoil Collected—127 tons.

Cost per ton for collection—£1 4s. 5.01d.

Table 27.

SUMMARY OF COSTS. CLEANSING SERVICE.

House and Trade Refuse.

Table showing costs for the year ended 31st March, 1938.

ITEM	PARTICULARS	I.—COLLECTION		II.—DISPOSAL		TOTAL	
		Including Depreciation or Loan Charges	Excluding Depreciation or Loan Charges	Including Depreciation or Loan Charges	Excluding Depreciation or Loan Charges	Including Depreciation or Loan Charges	Excluding Depreciation or Loan Charges
I	2	3	4	5	6	7	8
REVENUE ACCOUNT—							
A	Gross Expenditure	£5198 10 11	£4960 1 8	£998 11 11	£998 11 11	£6197 2 10	£5958 13 7
B	Gross Income	173 7 1	173 7 1	57 4 1	57 4 1	230 11 2	230 11 2
C	Net Cost	£5025 3 10	£4786 14 7	£941 7 10	£941 7 10	£5966 11 8	£5728 2 5
UNIT COSTS—							
D	Gross Expenditure per ton ..	10/0.48	9/6.95	1/10.06	1/10.06	11/10.54	11/5.01
E	Gross Income per ton ..	4.02	4.02	1.26	1.26	5.28	5.28
F	Net Cost per ton	9/8.46	9/2.93	1/8.8	1/8.8	11/5.26	10/11.73
G	Net Cost per 1,000 population ..	£124 15 9	£118 17 0	£23 7 6	£23 7 6	£148 3 3	£142 4 0
H	Net Cost per 1,000 houses or premises from which refuse is collected	£490 2 5	£466 17 2	£91 16 4	£91 16 4	£581 18 9	£558 13 6
RATE POUNDAGE—							
J	Net cost equivalent Rate in the £ ..	5 57	5 31	1 04	1 04	6 61	6 35
K	Percentage of J to Total Rates in the £ ..	3.98%	3.74%	.74%	.74%	4.72%	4.48%

1. a Total Refuse collected (in tons) (Based on Test Weighing) 10356 tons

b " " disposed of 10862 "

2. Population—Midsummer (Registrar-General) 1937 40270

3. Area (Statute Acres) 7895

4. Weight (in cwt.) per 1,000 population per day (365 days to year) 14.09

5. Number of houses and premises 10253

6. Rateable Value £235188

7. Product of Penny Rate £902

8. Total Rates in the £ 11/8d.

9. Method of Collection—

No. of Vehicles Refuse Collected

Horse Vehicles —

† Mechanical Vehicles 7

Container System (combination of mechanical & horse vehicles) 100%

Columns 3 and 7 .. Nil

Other Columns .. Nil

† One of the vehicles has an interchangeable body. The refuse body is taken off at night and a special steel tank is fitted for collection of nightsoil from pail closets. The cost of running this vehicle (apart from Petrol, which is charged on actual consumption) is based on actual mileage, and is apportioned as follows: Refuse Collection. 89.1% Nightsoil " 10.9%

10. Method of Disposal. Controlled Tipping

11. Average length of haul to point of disposal—2½ miles loaded

12. Amounts of any included in Item A in respect of new plant (as distinct from Repairs and Renewals) —

† Inhabited houses as given by Borough Treasurer 31/12/37 + 110 Trade Premises

Nightsoil Collection and Disposal. Table showing costs for the year ended 31st March, 1938.

ITEM	PARTICULARS	I.—COLLECTION		II.—DISPOSAL		TOTAL	
		Including Depreciation or Loan Charges	Excluding Depreciation or Loan Charges	Including Depreciation or Loan Charges	Excluding Depreciation or Loan Charges	Including Depreciation or Loan Charges	Excluding Depreciation or Loan Charges
I	2	3	4	5	6	7	8
REVENUE ACCOUNT—							
A	Gross Expenditure	£155 12 3	£149 1 6	£15 13 11	£15 13 11	£171 6 2	£164 15 5
B	Gross Income	11 3	11 3	Nil	Nil	11 3	11 3
C	Net Cost	£155 1 0	£148 10 3	£15 13 11	£15 13 11	£170 14 11	£164 4 2
UNIT COSTS—							
D	Gross Expenditure per ton	£1 4 6 07	£1 3 5 7	2/5 66	2/5 66	£1 6 11 73	£1 5 11 36
E	Gross Income per ton	1 06	1 06	Nil	Nil	1 06	1 06
F	Net Cost per ton	£1 4 5 01	£1 3 4 64	2/5 66	2/5 66	£1 6 10 67	£1 5 10 30
G	Net Cost per 100 houses or premises from which nightsoil is collected	£105 9 6	£101 0 7	£10 13 6	£10 13 6	£116 3 0	£111 14 1
RATE POUNDAGE—							
J	Net Cost equivalent rate in the £	171	165	107	017	188	182
K	Percentage of J to Total Rates in the £	12%	11%	101%	101%	13%	13%

1. Total nightsoil collected in tons 127
2. Number of houses with pail closets at beginning of 1937 192—147 at end of 1937
3. Method of Collection:—By one petrol vehicle which has interchangeable refuse and night-soil bodies. Are apportioned as follows:—
 Refuse Collection ... 89 1%
 Nightsoil ... 10 9%
4. Method of Disposal: Brought to Central Depot and discharged into main outfall sewer.

